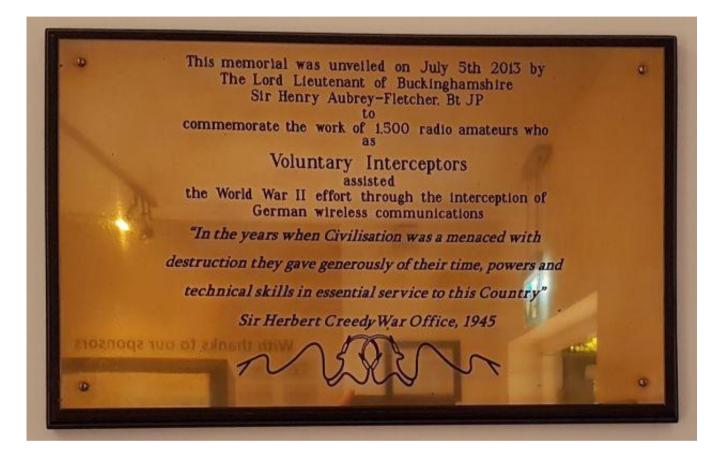
# ENIGMA 2000 NEWSLETTER



http://enigma2000group.org





This commemorative brass plaque can be seen in the entrance to the National Radio Centre [sponsored by RSGB] at Bletchley Park to remember the work done by 1500 Radio Amateurs in WW2 who intercepted coded messages sent by the Abwher.

Notable that without wireless intercepts Bletchley Park would have had little to do

ISSUE 126 September 2021

http://www.enigma2000.org.uk

## **Editorial**

Once again the expected change in propagation has yet to appear; the number stations continue unbounded with a few changes of frequency. E07a Wednesday 2000z and Thursday 0430z schedules being expected. Signal strengths here remained very strong with some exception.

Noise of course remains a problem and it seems OFCOM has dumped any willingness to police the SW spectrum as other stuff goes much higher into GHz and also via satellite and via the internet and short radio links where necessary; read more further on.

One member visited Scarborough and sent your editor a postcard to remind him of a certain hotel that might have been good in its Victorian heyday but not now.

He remarked about seeing certain antennas as he entered Scarborough, so here they are in all their glory:



Antennas seen at CSOS Irton Moor, better known as GCHQ Scarborough

More on Scarborough antennas next Issue

We have been joined by new member Xaver; he writes:

Dear readers of the ENL,

What? There is a new member? - Yes, I'm Xaver and I recently became a member of the ENIGMA2000 group. In the following I want to introduce myself briefly.

I'm 19 years old and come from Puchheim in Upper Bavaria. I've been listening to numbers tations since nearly seven years now. Most of the time I was just a quiet reader of ENL at the beginning. Now I wanted to change that and that's why I joined the E2k. The impetus for this gave me Jochen, who is generally known as "Kopf". At this point, thanks for him for his great idea.

Now we come to my favourite subjects. Generally I mostly deal with spoken broadcasts, such as E07 and E11. But sometimes I also listen to Morse code stations such as M01 and M12. A PL-880 world receiver by TECSUN is used as receiving equipment. I always use the telescopic antenna for reception. Geographically, I am very well located at my reception location in JN58OA. There is no QRM in my house at all due to interference. So it is also possible to receive S28 all day long with sufficient sound quality.

All in all, I am very happy to be able to work on the E2k project. I believe that I'll bring a little breath of fresh air into E2k. I am definitely looking forward to further cooperation.

Many greetings and 73 Xaver Hellmeier (XAH)

Welcome indeed Xaver; hope you enjoy your stay with us, of course. Thanks for this intro.

PoSW shared his logs again for this newsletter. Like me he has noted this increase in noise levels. For myself with my house in total disarray with a major refurbishment going on I have noted a slight decrease in noise but the TV and Radio are not plugged in so that might be a source as anticipated so ferrite slugs on the mans cables before reconnection sometime in the future. Peter writes '.... an increase in local RF noise interference which was first noticed in early July; I probably mentioned some time ago that I had suffered intense interference from the HF end of the medium wave broadcast band up to about 3 MHz which had been on for several years but then suddenly vanished. Something similar has appeared again, not quite so strong but enough to wipe out all but the strongest signals between about 1400 and 3000 kHz. No number stations here but monitoring the 160 metre amateur band is an interesting diversion, I had got into the habit of listening to a regular net on 1933 in the late evenings and also the Dutch music pirates which often show up around 1630 to 1700 or so. I was hoping this new interference was going to be something temporary but it has been on constantly for the best part of two months now.'

Much like the rest of us it seems the noise in the MW section has gone unpoliced from OFCOM [with shift to FM/DAB do they care?] although at least one minicab driver who carries us back from shopping has Dilsi Radio on MW on in his car. There's some very pleasant Indian Film Music to be had.

#### REO from En125; Tony writes an explanation:

Regarding your opening piece on RMP REO.

These REO messages (from Kaliningrad Oblast as you say) are Navigation warnings in general but also include other coded messages for the fleet. The frequencies are also used for other traffic.

REO is a collective callsign for - All ships, Baltic Fleet

They are sent out on multiple frequencies (not just the ones you mention) – probably from different sites. There are a number in the region. This would probably be the reason for the differences in the transmissions on the freqs you mention rather than any purpose to it.

Example below of transmissions from 22/2/21

As you'll see, different frequencies used for REO messages. The opening ones on 8627 are for different ships – likely orders. Then REO messages begin for remaining ships in fleet.

5179 kHz has the PROGNOZ POGODY (weather for region – didn't copy it down in this case)

Then various PRIPs – navigation warnings Take the 1800z one

1634z RFK99 DE RMP QTC 931 14 22 1038 931 =

PRIP KALININGRAD 63 KARTA 22055 ЮГОВОСТОЧНАЯ ЧАСТЬ БАЛТИЙИКОГО МОРЯ Translates to:

#### PRIP KALININGRAD 63 MAP 22055 SOUTH EASTERN BALTIC SEA

Or Warning number 63 for Kaliningrad region, SE Baltic Sea, reference map number 22055

8627 kHz

#### 5179 kHz

1745z REO DE RMP QTC 904 233 22 1955 904 = SML = PROGNOZ POGODY......

1800z REO DE RMP QTC 298 187 22 2001 298 =

PRIP KALININGRAD 63 KARTA 22055 ЮГОВОСТОЧНАЯ ЧАСТЬ БАЛТИЙИКОГО МОРЯ 1 .УЧЕНИЯ КОРАБЙ 24 ПО 27 ФЕВ 0800 ДО 1600 РАЙОНЕ ВРЕМЕННО ОПАСНОМ ДЛЯ ПЛАВАНИЯ БР - 117 ЦЕНТРОМ 55-20N 019-45E 2 .OTM ЭТОТ НР 271700 ФЕВ

PRIP KALININGRAD 64 KARTA 22055 22100 ЮГОВОСТОЧНАЯ ЧАСТЬ БАЛТИЙИКОГО МОРЯ

1 . УЧЕНИЯ КОРАБЛЕЙ 24 ПО 27 ФЕВ 0800 ДО 1600 РАЙОНЕ ВРЕМЕННО ОПАСНОМ

ДЛЯ ПЛАВАНИЯ

55-32.0N 019-01.6E

55-32 ON 019-50.0E

55-03.0N 019-35.0E

54-46.4N 019-35.0E

54-50.3N 019-20.3E

55-11.5N 019-09.2E

55-20.0N 019-04.6E

#### 2.OTM ЭΤΟΤ HP 271700 ΦΕΒ

PRIP KALININGRAD 65 KARTA 24128 ЮГОВОСТОЧНАЯ ЧАСТЬ БАЛТИЙИКОГО МОРЯ 1. УЧЕНИЯ КОРАБЛЕЙ 24 ПО 27 ФЕВ 0800 ДО 1600 РАЙОНЕ ВРЕМЕННО ОПАСОМ ДЛЯ ПЛАВАНИЯ БР - 161 ЦЕНТРОМ 55-06N 019-50E 2. ОТМ ЭТОТ НР 271700 ФЕВ =

1824z REO DE RMP OTC 626 327 22 2002 686 =

#### PRIP KALININGRAD 63 KARTA 25052 ГДАНЬСКИЙ ЗАЛИВ

1 . УЧЕНИЯ КОРАБЛЕЙ 24 ПО 27 ФЕВ 0800 ДО 1600 РАЙОНЕ ВРЕМЕННО ОПАСНОМ ДЛЯ ПЛАВАНИЯ РАДИУСОМ 1.5 МИЛИ ИЗ 54-50N 019-50E

2. OTM ЭΤΟΤ ΗΠ 271700 ΦΕΒ

#### PRIP KALININGRAD 70 KARTA 25051 25052 ГДАНЬСКИЙ ЗАЛИВ

1 . УЧЕНИЯ КОРАБЛЕЙ 24 ПО 27 ФЕВ 0800 ДО 1600 РАЙОНЕ ВРЕМЕННО ОПАСНОМ ДЛЯ ПЛАВАНИЯ

54-43.7N 011-37.0E

54-40 8N 019-45 0E

54-37.9N 019-41.5E

54-39.6N 019-37.0E

#### 2. ОТМ ЭТОТ НП 271700 ФЕВ

#### PRIP KALININGRAD 69 KARTA 25052 ГДАНЬСКИЙ ЗАЛИВ

1 . УЧЕНИЯ КОРАБЛЕЙ 24 ПО 27 ФЕВ 0800 ДО 1600 РАЙОНЕ ВРЕМЕННО ОПАСНОМ ДЛЯ ПЛАВАНИЯ

54-44.9N 019-57.4E

54-45.6N 019-50.6E

54-48.0N 019-51.2E

54-47.6N 019-58.0E

#### 2. ОТМ ЭТОТ НП 271700 ФЕВ

#### PRIP KALININGRAD 68 KARTA 25052 ГДАНЬСКИЙ ЗАЛИВ

1 . УЧЕНИЯ КОРАБЛЕЙ 24 ПО 27 ФЕВ 0800 ДО 1600 РАЙОНЕ ВРЕМЕННО ОПАСНОМ ДЛЯ ПЛАВАНИЯ

54-55N 019-45E

54-47N 019-54E

54-53N 019-55E

54-45N 019-57E

54-49N 019-51E

#### 2 . ОТМ ЭТОТ НП 271700 ФЕВ

#### PRIP KALININGRAD 67 KARTA 23100 ГДАНЬСКИЙ ЗАЛИВ

1 . УЧЕНИЯ КОРАБЛЕЙ 24 ПО 27 ФЕВ 0800 ДО 1600 РАЙОНЕ ВРЕМЕННО ОПАСНОМ ДЛЯ ПЛАВАНИЯ РАДИУСОМ 2 МИЛИ ИЗ 54-44.6N 019-23.8E

2 . OTM ЭТОТ НП 271700 ФЕВ

#### PRIP KALININGRAD 66 KARTA 25052 ГДАНЬСКИЙ ЗАЛИВ

1 . УЧЕНИЯ КОРАБЛЕЙ 24 ПО 27 ФЕВ 0800 ДО 1600 РАЙОНЕ ВРЕМЕННО ОПАСНОМ ДЛЯ ПЛАВАНИЯ БР - 163 ЦЕНТРОМ 54-53N 019-45E

2. OTM ЭТОТ НП 271700 ФЕВ

1911z REO DE RMP QTC 822 155 22 2005 822 =

PRIP PETERBURG 37 KARTA 25053 25056 ВОСТОЧНАЯ ЧАСТЬ ФИНСКОГО ЗАЛИВА 1. УЧЕНИЯ КОРАБЛЕЙ 24 ПО 27 ФЕВ 0800 ДО 1600 РАЙОНЕ ВРЕМЕННО ОПАСНОМ ДЛЯ ПЛАВАНИЯ КР - 107 ЦЕНТРОМ 60-07N 028-44E 2. ОТМ ЭТОТ НП 271700 ФЕВ

PRIP PETERBURG 38 KARTA 25001 ВОСТОЧНАЯ ЧАСТЬ ФИНСКОГО ЗАЛИВА 1 . УЧЕНИЯ КОРАБЛЕЙ 24 ПО 27 ФЕВ 0800 ДО 1600 РАЙОНЕ ВРЕМЕННО ОПАСНОМ ДЛЯ ПЛАВАНИЯ КР - 105 ЦЕНТРОМ 60-06N 029-08E 2 . ОТМ ЭТОТ НП 271700 ФЕВ

PRIP PETERBURG 39 KARTA 23020 ВОСТОЧНАЯ ЧАСТЬ ФИНСКОГО ЗАЛИВА 1 . УЧЕНИЯ КОРАБЛЕЙ 24 ПО 27 ФЕВ 0800 ДО 1600 РАЙОНЕ ВРЕМЕННО ОПАСНОМ ДЛЯ ПЛАВАНИЯ

60-00.5N 027-16.5E 60-05.4N 027-34.0E 59-53.0N 027-48.0E 59-48.0N 027-31.0E

2 . OTM ЭТОТ НП 271700 ФЕВ

1931z REO DE RMP QTC 536 38 22 2225 536 = SML =

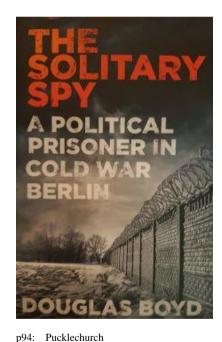
BALTIYSKOE MORE .....

1938z REO DE RMP OTC 630 96 22 2010 630 =

ВСЕМ СУДАМ ДЕЙСТВУЮЩИЕ ....

Many thanks Tony, this may be continued.....

## **Recommended Reading**



In June two ENIGMA members met at London Victoria Railway station. Having evaded HMG's app for COVID testing etc we found a table and settled down to the business of espionage. First up were two containers of beer, one lager [excellent] and an ale [memorable taste]. Quickly squirreled away we took a delivery of our purchased requirements as two books were revealed. The first 'Daughters of the KGB' was being returned to me after a loan whilst that on the right, and by the same author was a loan to me.

I started this book straight away that evening on my return home. It was an invigorating read as it followed Mr Boyd's change from Mr to recruit in the RAF. He was not selected as a Brylcreem boy but as a Linguist or 'lingy' as they became to be known in the Y service. His language was Russian which he learnt at a variety of places; Crail and Tangmere spring to mind here.

He also learnt how to tune a radio as his task was to be the interception of Russian pilot's utterances. I'm not writing too much as this is a well recommended book and I don't want to describe the Set Rooms or what went on within in case I take too much away from the book.

I even made note in pencil on a piece of paper of interesting and useful phrases and bits of knowledge:

p36: s bol'shimi grudinkami

p59: Two interesting characters: Wingco Cash-my-Cheque

p60: Wiry Twerp and Japanese Joe

p61: A tick-tocking\* airman, nicknamed 'Jingle Bollocks.'

[\*Tick-tocking is marching with same arm advancing or retarding with the same leg as you march]. I served with someone with that nasty habit and met him again at my passing out parade at Hendon. Memorable indeed with a legion booze up the night before. No PACE then!

p96: Batty's Belvedere

p98: Number Station transmission

p99: Ferret flights

p122: Descripton of the Set Room

There's lots more but I ran out of paper for notation so you'll have to look for yourselves. It's a very good read and I'll probably buy my own copy once I've returned this to the lending member.

This airman went across the divide into East Berlin [he was stationed at Gatow --- 499 to note here] and the silly bugger was nicked and passed on to the STASI. He was imprisoned and there's good description here of places where 499 and 613 have actually been; Not particularly a problem if you haven't but you'll read that Mr Boyd now has his own STASI file – just like the bloke who lent me the book. Pulled out in a Kensington Pub one Christmas it made brilliant reading; that member, as well as 499 and 613 have all been to the application office in the Normanstrasse offices after intercepting XPA1 b as it was from a room in an hotel not 300m away from the STASI HQ.

Anyway, Mr Boyd adequately describes how the STASI looked after him and his return to civilisation as we know it. Not Deutschland '83, '85 or '89 whatever but good and hard facts.

In the final chapters Boyd takes time to mention the film 'Das Leben der Anderen' - Lives of others which adequately paints the picture of STASI controlled East Germany.

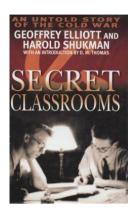
On p171 he mentions an Intelligence Corps Corporal Brian Patchett who, employed as a Russian Linguist in the Royal Signals Detachment at RAF Gatow defected July 1963. That was interesting as it was one I will research further.

So, the final scale weighing for the book – it's a ripping yarn, true, and worthy buying.

Thanks to the most fluent member who took the trouble to lend!

For more on Brian Patchett who Mr Boyd mentioned was a bed-wetter as mentioned by his his CO: <u>Brian Patchett (langeleben.co.uk)</u> \*There's a hand sketch of the set-room in this link, note the form of the figure '1'

In his book, Mr Boyd mentions a book 'Secret Classrooms.' Written by Messrs Geoffrey Elliott and Shukman it was reviewed in ENIGMA2000 Newsletter issue 110:



Secret Classrooms: This excellent book by Elliott and Shukman outlines in good description the call up, selection of and training as Russian Linguists, RAF Tangmere, Bodmin, Crail and so on. The production of an in course newsletter 'Samovar' [The Joint Services School of Linguists in school magazine] is described and the sometimes hilarious and sometimes most serious subject is covered extremely well. It is a book that is a good, solid read. Took me just three days to exhaust and I re-read again, purely for the pleasure.

Geoffrey Elliott became an Investment Banker on demob, eventually retiring in Bermuda, whilst Harold Shukman became an Academic after taking a First in Russian Language and Literature at Nottingham University [where yours truly met Geoffrey Perry OBE of Kettering Grammar School Sputnik fame during my time there].

I read 'Secret Classrooms' in 2002; I was saddened to read of Harold Shukman's passing in the Times Obituary column 'Register' Friday October 12, 2012. He had died on July 11 aged 81.

An excellent, very worthwhile read about those who joined as 'oiks' but who left so much more prepared for the civilian life that awaited them, using the language they had become proficient in.

## German police arrest Briton on suspicion of spying for Russia Employee at British embassy in Berlin suspected of passing on documents in exchange for cash

https://amp.theguardian.com/world/2021/aug/11/german-police-arrest-briton-on-suspicion-of-spying-for-russia?

German police have arrested a British man who worked at the British embassy in Berlin on suspicion of spying for Russian intelligence in exchange for cash bribes, according to prosecutors.

Germany's highest public prosecutor said the man, identified only as David S, was arrested at his Potsdam apartment at 2.20pm on Tuesday, and his home and embassy workplace were searched.

The 57-year-old Briton is understood not to be a diplomat but a private contractor working as a security guard at the Berlin embassy and therefore does not hold diplomatic immunity.

He is suspected of having worked for a Russian intelligence agency at least since November 2020, at least once passing on documents he had acquired through his work to a handler.

He is alleged to have been paid a cash bribe to pass information to Russian intelligence.

He is a British national and was under surveillance by British and German investigators, believed to have included MI5, but officials reluctant to discuss when that started.

The operation that led to David S being suspected was "intelligence-led".

He is alleged to have received cash payments of an as yet unspecified sum in exchange for information. Citing prosecutors' circles, the German news magazine Focus reported on Wednesday that the information passed on related to counter-terrorism issues.

Germany's public prosecutor said the arrest was the result of a joint investigation by German and British authorities. The Metropolitan police said the investigation into David S had involved Scotland Yard's counter-terrorism officers.

"The man was arrested in the Berlin area on suspicion of committing offences relating to being engaged in 'intelligence agent activity' (under German law)," the Metropolitan police said.

"Primacy for the investigation remains with German authorities. Officers from the counter-terrorism command continue to liaise with German counterparts as the investigation continues."

The Met's counter-terrorism command is responsible for investigating alleged breaches of the Official Secrets Act.

A spokesperson for the British Home Office said: "An individual who was contracted to work for the government was arrested yesterday by the German authorities. It would not be appropriate to comment further as there is an ongoing police investigation."

Nick Thomas-Symonds, the shadow home secretary, said the allegations potentially amounted to a "serious breach of UK national security".

"All measures must now be taken – urgently – to establish exactly what information has been passed to Russian intelligence and the impact this has on the UK, as well as that of our allies," he said.

"This is yet another example of the real threat posed by Russia, so it is unacceptable that Conservative ministers have been so slow to enact the measures necessary to protect the UK, including implementing the recommendations of the Russia report."

https://amp.theguardian.com/world/2021/aug/11/german-police-arrest-briton-on-suspicion-of-spying-for-russia?

Also .....

Michael Binyon's 'Kremlin's spies see Germany as a vital source of tech and military secrets' is well worth reading also https://www.thetimes.co.uk/article/kremlins-spies-see-germany-as-a-vital-source-of-tech-and-military-secrets-wdnbddmdf

Interestingly in a piece sent to us by 'E' from the Metro and penned by Aidan Radnedge states, 'Sources claim Russia activated Smith, 57, as dissident Alexei Navalni lay in a Berlin hospital after a failed Novichok assassination bid, and MI6 agents arrived to monitor Kremlin spies.

The security guard was told to keep tabs on people arriving at the embassy, they say. One told the Mail on Sunday 'The city was full of Russian agents we wanted to keep an eye on. We think they used him as part of that cat and mouse.''

Full of Russian agents FFS! The Russian Embassy is a few minutes' walk from the British Embassy and just a tad further from the US Embassy. SEE BELOW:



As seen/plotted by the Joint Welsh/Londoner mission to Berlin in 2010. Spoken about on the morning of 24<sup>th</sup> August 2021 during a telephone call between the two participants and in which Kipling's 'Mandalay' was recited.

[Thanks E, PLdn and HJH]

# Russian army officer handed eight-year prison sentence for espionage

July 02, 18:23

KRASNODAR, July 2. /TASS/. https://tass.com/society/1309973/

A court in the Krasnodar Region sentenced Andrei Pikula, previously detained by the Federal Security Service (FSB), on charges of being recruited by a foreign intelligence service, the court press service said Friday.

"The Krasnodar District Court has completed reviewing the criminal case against Andrei Pikula, born in 1991, charged with [espionage in the form of collecting and passing information constituting a state secret to a representative of a foreign state]. The court concluded that the defendant's guilt had been proven. The court has considered the mitigating circumstances, and sentenced the defendant to a penalty below the lowest possible under Article 275 - to eight years in prison," the court said.

The defendant had a military rank of reserve lieutenant, but was stripped of it by the court's ruling.

According to the press service, the defendant pleaded guilty. The investigation uncovered that he was recruited by a foreign intelligence agent in 2018, and was tasked with collecting classified information. He carried out his mission in 2019, and handed over information to a foreign intelligence service until his actions were thwarted by the FSB Krasnodar Region Directorate.

https://tass.com/society/1309973/

## Ex-CIA officer accused of spying for China has memory issues

JENNIFER SINCO KELLEHER Fri, 30 July 2021, 1:24 am·1-min read

https://uk.news.yahoo.com/ex-cia-officer-accused-spying-002426012.html

HONOLULU (AP) — A former CIA officer accused of spying for China is asking for a mental competency evaluation after telling his attorney he believes he is suffering from the early stages of Alzheimer's disease and is having trouble remembering things.

Alexander Yuk Ching Ma, a former CIA officer and contract linguist for the FBI, was arrested last year after an undercover operation in which prosecutors say he accepted thousands of dollars in cash in exchange for his past espionage activities. He told a law enforcement officer who was posing as a Chinese intelligence officer that he wanted to see the "motherland" succeed and that he was eager to resume helping China after the coronavirus pandemic subsided, prosecutors said.

Ma's court-appointed attorney, Birney Bervar, said Thursday that he felt compelled to file a motion for a mental competency evaluation after meeting with Ma a couple of weeks ago.

"Ma said he just can't remember things and that he believes it impairs his ability to assist properly in his defense," the motion said.

Bervar's motion also noted that Ma's older brother developed Alzheimer's 10 years ago and is now completely disabled by the disease. The brother is referred to as a co-conspirator in the indictment against Ma, but prosecutors didn't charge him because of his incompetency due to Alzheimer's, the motion said.

A magistrate judge scheduled a hearing for Aug. 12 on the motion.

https://uk.news.yahoo.com/ex-cia-officer-accused-spying-002426012.html

# Two types of terror threat will emerge in wake of Afghanistan fall, says former head of MI5

By Sarah Harvey

https://www.standard.co.uk/news/uk/terror-threat-afghanistan-mi5-jonathan-evans-b951539.html

Two types of terror threat will emerge in Afghanistan over "the coming months and years," former MI5 chief Lord Jonathan Evans has said.

He told BBC Radio 4's Today programme: "I think there are two problems - I think there is more operating space more likely to be available to groups like al Qaeda, and there have been reports of Islamic State elements present in Afghanistan.

"If they get the opportunity to put down infrastructure to train and to operate then that will pose a threat to the West more widely.

"There's also the psychological effect of the inspiration that some people will draw from the failure of Western power in Afghanistan.

"So, I think, in practical terms and in terms of ungoverned space, but also in psychological terms, it probably does mean an increase in threat over the coming months and years."

Before the fall of Afghanistan the former chief of the Secret Intelligence Service, Sir Alex Younger, told Sky News that "the terror threat to Britain will grow if the West abandons Afghanistan".

It comes as the chief of defence staff, General Sir Nick Carter, said the Taliban may be more moderate than their 1990s counterparts.

Sir Nick said the Taliban did not want to become "international pariahs" and said, "I do think they have changed".

Despite this there were growing reports on Friday that Taliban fighters were going door-to-door in Kabul looking for those who had worked with the previous regime, and threatening them into joining the Taliban.

Tens of thousands of Americans and Afghans who collaborated with US forces remain stranded in Kabul, as the US government grappled with a backlog of visas.

https://www.standard.co.uk/news/uk/terror-threat-afghanistan-mi5-jonathan-evans-b951539.html

# French spy agency DGSI emerges from shadows with first website

Issued on: 08/07/2021 - 09:52

The DGSI website aims to demystify the agency's activities to millions of French people. AP - Stephane de Sakutin

Text by: Amanda Morrow with RFI

 $\underline{https://www.rfi.fr/en/france/20210708-french-spy-agency-dgsi-emerges-from-shadows-with-first-website?}$ 

France's intelligence agency, the DGSI, has launched its first website – giving ordinary folk a peek at its top secret missions fending off terrorism, cyberattacks, foreign spies and more.

A year in the making, the website is a PR tool of sorts. It aims to demystify the agency's activities to millions of French people who are either unsure what it does, or who believe it was created to monitor the population.

Described as "a tool for contact and exchange", the new online address also gives individuals another avenue for reporting a person suspected of having been radicalised.

"All of the world's major intelligence services have dedicated website," DGSI director general Nicolas Lerner told a press conference Tuesday at the agency's headquarters in the Paris suburb of Levallois-Perret.

"We have an obligation to publicise what we do."

Advice, info, quizzes

As well as offering practical advice on how to protect oneself from cyberattacks, the DGIS website warns citizens of the unscrupulous methods used by foreign spy agencies to recruit sources and collect sensitive information.

"A professional manipulator, a spy will first show sympathy and interest in the private life and activities of the person they are targeting," it cautions.

Sky's the limit as space drills show off French military prowess

What pushed General Lecointre to step down as head of French armed forces?

"They are an enlightened strategist who will do everything in their power to trap their target in an insidious spiral from which that person will not be able to extricate themselves without outside help."

The website also offers a virtual museum packed with unusual objects related to the world of espionage – think James Bond-style gadgets – as well as quizzes for young people who might one day want to become secret agents.

Then there's info on how the service has been set up, the legal framework under which it operates and a list of the modern defence challenges it faces.

Active recruitment

Created in 2014, the DGSI is the resulting merger of two police services – the General Intelligence and the Directorate of Territorial Surveillance. It actively recruits hundreds of agents every year, boasting a team of almost 5,000 men and women.

The testimonies of some of those agents can be found on the website, where would-be agents can also lodge their job applications.

"Talking about the secret activities of an intelligence service is complicated," Lerner said.

"But it is precisely because we are a service whose activity is classified that we have a strong obligation to talk, to explain and to make known who we are."

https://www.rfi.fr/en/france/20210708-french-spy-agency-dgsi-emerges-from-shadows-with-first-website?

This next article worth opening for the imagery .....

# For your eyes only: MI5 shares unseen images of its former Mayfair HQ, where 'Registry Queens' carried out phone-tapping

The security service posted images on its Instagram account on Thursday Collection of just five images showed its one-time base at 1-4 Curzon Street The intelligence agency was based there from 1977 until 1994 By HARRY HOWARD, HISTORY CORRESPONDENT and ED WIGHT FOR MAILONLINE PUBLISHED: 01:22, 9 July 2021 | UPDATED: 01:25, 9 July 2021

https://www.dailymail.co.uk/news/article-9769759/MI5-shares-unseen-images-former-Mayfair-HQ-Registry-Queens-carried-phone-tapping.html

It was founded 112 years ago amid escalating tensions with Imperial Germany.

Since then, MI5's spies have worked in the shadows to snoop on targets, foil bomb plots and keep leading politicians informed.

But now, the domestic intelligence agency, which is also known as the Security Service, has said goodbye to secrecy and revealed the inside of its former Mayfair base for the first time.

Posting the 'for your eyes only' pictures on it's Instagram account, the spy agency said: 'More than 25 years after MI5 left the building for the last time, we're now pleased to be able to share some rare images of our Curzon Street office, the home of MI5 between 1977-1994.'

The collection of five photos shows female intelligence officers at their desks at 1-4 Curzon Street, known as 'Curzon Street House', where the Security Service housed its registry, administration and technical services departments.

The female staff were known as 'Registry Queens' and it was here that phone-tapping and other electronic surveillance methods were monitored.

The collection of five photos shows female intelligence officers at their desks at 1-4 Curzon Street, known as 'Curzon Street House', where the Security Service housed its registry, administration and technical services departments. MI5 vacated the building in 1994

In one photo, a dark-haired spy is seen listening back to a reel of tape, presumably of a covert surveillance.

Another photo shows an office with women apparently listening to recordings.

A third shows a female officer changing a spool of tape on a machine.

Built in the 1930s, the most noticeable feature of the building was the absence of windows on the street level.

Higher floors were hidden by weighted net curtains to prevent prying eyes.

In one photo, a dark-haired spy is seen listening back to a reel of tape, presumably of a covert surveillance

Another photo shows an office with women apparently listening to recordings

A third image shows a female officer changing a spool of tape on what appears to be a recording device

Instagram goes inside MI5: Spies post first picture from...

Writing on Instagram, MI5 added: 'Although there was never any official mention of MI5's offices at Curzon Street, bus conductors and taxi drivers were far less discreet.

'One former colleague recalls, "When you got off the bus in Park Lane the conductor would shout down the bus 'Curzon Street and MI5' and all of us would troop off looking somewhat embarrassed!".

Prior to moving to 'Curzon Street House', MI5 housed its registry department on the ground floor of the street's Leconfield House.

Also seen in the collection is an image showing a series of machines on wheels. Writing on Instagram, MI5 added: 'Although there was never any official mention of MI5's offices at Curzon Street, bus conductors and taxi drivers were far less discreet. One former colleague recalls, "When you got off the bus in Park Lane the conductor would shout down the bus 'Curzon Street and MI5' and all of us would troop off looking somewhat embarrassed!"'

It was there that in famous MI5 whistleblower Peter Wright was based before he wrote his explosive book Spy Catcher following his retirement.

He revealed how the service 'bugged its way across London' and also alleged that MI5 boss Sir Roger Hollis was a Russian spy.

The book was published first in Australia but was initially banned in England due to Wright's explosive allegations.

Prior to moving to 'Curzon Street House', MI5 housed its registry department on the ground floor of the street's Leconfield House

However, the book was still available elsewhere and the attempted censorship only increased its popularity.

In mid-1987, a previous ban on English newspapers reporting about the book was lifted.

A year later, the book was cleared for sale and sold more than two million copies, making Wright a millionaire when he died in 1995.

Since 1994, MI5 has been based at Thames House, a building it had previously occupied in the 1930s.

It's post on Thursday came after the service joined Instagram in April. In its first post, it shared a picture from the lobby of its Thames House headquarters.

It said @mi5official will 'bust popular myths about its work, provide explainers for intelligence terminology, promote career opportunities and bring to life events in MI5's 112-year past'.

Earlier this year, MI5's director general Mr McCallum said he wanted the traditionally highly secretive agency to 'open up and reach out in new ways'.

'Much of what we do needs to remain invisible, but what we are doesn't have to be,' he said in his first media engagement in October, after taking up the job in late April.

In fact, opening up is key to our future success,' added McCallum, a MI5 veteran of more than 25 years who oversaw all counter-terror operations around the 2012 London Olympics.

https://www.dailymail.co.uk/news/article-9769759/MI5-shares-unseen-images-former-Mayfair-HQ-Registry-Queens-carried-phone-tapping.html

# Pentagon Sees China's Offensive Space Technology 'On the March'

By Anthony Capaccio 10 July 2021, 10:00 GMT China is investing in weapons to jam, destroy U.S. satellites Beijing seeks to narrow gap in space technology with U.S.

 $\underline{https://www.bloomberg.com/news/articles/2021-07-10/pentagon-sees-china-s-offensive-space-technology-on-the-marchet for the action of the property of the p$ 

China is making sizable, long-term investments in weapons designed to jam or destroy satellites as the nation seeks to rapidly narrow the gap in space technology with the U.S., according to the top intelligence official for the Pentagon's Indo-Pacific command.

China is pushing to develop antisatellite weapons with capabilities from "dazzling to jamming, to kinetic kill-from-the-ground, from space -- all that, they're on the march," Rear Admiral Michael Studeman said this week during an intelligence-security trade group's webinar.

Studeman's comments mark the most current unclassified assessment of the counter-space capabilities of a nation that Defense Secretary Lloyd Austin repeatedly refers to as the top challenge for U.S. defense planning and spending.

China's threats to U.S. satellites as well as Russian advances in counterspace technologies were among the primary justifications American officials cited for establishing the U.S. Space Force, the sixth U.S. military service branch and the regional Space Command, during the Trump administration.

"They take a look at our space capability and want to equal and exceed those and be able to dominate to guarantee themselves the maneuvering they need to be able to secure their objectives if they're in a fight," Studeman said.

The U.S. Office of the Director of National Intelligence said in April that the Chinese military "will continue to integrate space services -- such as satellite reconnaissance and positioning, navigation, and timing and satellite communications -- into its weapons and command-and-control systems to erode the U.S. military's information advantage."

Developing so-called counterspace operations will be integral to a potential military campaign, the DNI said. Beijing continues to train its military space elements and "field new destructive and nondestructive ground- and space-based antisatellite (ASAT) weapons," the intelligence office said in its annual Threat Assessment report.

It has "already fielded ground-based ASAT missiles intended to destroy satellites in low-earth orbit and ground-based ASAT lasers probably intended to blind or damage sensitive space-based optical sensors" on low-earth orbit satellites, according to the report.

The House Appropriations Committee, in a draft report on the fiscal 2022 defense bill obtained by Bloomberg Government, signaled its concern over "the growing threats posed by ground-based lasers capable of damaging or destroying sensitive space sensors in low-orbit, and the lack of a coordinated strategy to understand this threat and develop concepts to mitigate its risks."

Without mentioning China, the report directed the Pentagon, in coordination with the ODNI, "to provide a plan to collect, consolidate, and characterize laser threat activity data of potential adversaries, and to develop strategies to mitigate these threats."

Aside from destructive counterspace technologies, China also is pursuing parallel programs for military and commercial communications satellites and owns and operates about 30 of those for civil, commercial and military satellite communications, the Defense Intelligence Agency said in 2019. Beijing also operates a small number of dedicated military communications satellites.

The U.S. has a "substantial amount of activity going on on our side" as "we recognize the threat here," Studeman said. "It will be a game of measures and countermeasures and countermeasures for some time to come."

A top U.S. counterspace weapon designed to temporarily jam but not destroy Chinese and Russian satellites is known as the Meadowlands system. The U.S. Space Force is building an arsenal of as many as 48 of these ground-based weapons over the next seven years and declared the first one operational in March 2020.

https://www.bloomberg.com/news/articles/2021-07-10/pentagon-sees-china-s-offensive-space-technology-on-the-march

## Hunter becomes hunted as Royal Navy helicopters hound Russian submarines

Dominic Nicholls Fri, 9 July 2021, 5:05 pm

A Russian submarine stalked the Royal Navy's Carrier Strike Group (CSG) prompting a helicopter hunt for the vessel, The Telegraph can reveal.

Merlin helicopters were scrambled to search for the Russian submarine when the group was passing through the eastern Mediterranean.

The two aircraft dropped sonobuoys - equipment designed to sink beneath the water to find submarines - to listen for its distinctive sounds after it was suspected to be monitoring HMS Queen Elizabeth, Britain's new aircraft carrier, and escort ships.

The hunt for the submarine took place four days after the confrontation in the Black Sea between HMS Defender, a Type-45 air defence ship, and Russian forces.

Russian submarines are known to be active in the eastern Mediterranean from the Tartus naval base on the Syrian coast.

Their primary mission is to lurk just off the coast of Cyprus, monitoring RAF aircraft launching from RAF Akrotiri to strike Daesh targets in Syria.

It is not known if the Russian boat - understood to be a diesel-electric Kilo-Class submarine from the Black Sea fleet - was caught unawares as it monitored British air operations, or if it was diverted specifically to spy on HMS Queen Elizabeth.

Two Merlin Mk2 submarine-hunting aircraft were launched, one from HMS Queen Elizabeth, the other from the Royal Fleet Auxiliary ship Fort Victoria, a replenishment tanker.

It is not known if the USS The Sullivans, an American destroyer, or HNLMS Evertsen, a Dutch frigate, both contributing to the CSG, took part in the mission.

The Telegraph understands at least one sonobuoy was dropped from the Merlins.

There are seven such helicopters deployed with the group, and these would likely have been operating in coordination with other anti-submarine assets. These include the two Type-23 frigates HMS Kent and HMS Richmond and the Royal Navy's deployed hunter-killer submarine, thought to be HMS Astute or HMS Ambush

While the MoD refused to confirm the incident, understood to have occurred on June 27, it said "robust measures" were in place to protect the CSG, which is on its first operational deployment.

Defence sources have suggested the suspected Kilo-Class would likely have come from Moscow's Black Sea fleet.

Ryan Ramsey, a former Royal Navy submariner and commander of the world-renowned Perisher training course, said: "Submarines aim not to be detected – it stops you completing your tasks.

"Evasion in a submarine is really difficult when you're going up against something as capable as Merlin helicopters. The UK has always been really effective at anti-submarine warfare using ships, submarines and aviation.

"When I was teaching the submarine command course, Perisher, it was the Merlins that the student captains worried about the most. I'm sure the opposition are doing the same thing."

The Russian Navy is thought to operate only diesel-electric boats in the Mediterranean, preferring to keep its nuclear powered submarines - capable of long passages submerged - in the North Atlantic, where they mainly shadow Britain's nuclear deterrent.

Although older boats, diesel-electric submarines are quieter than nuclear powered vessels as they operate only on battery power when submerged.

However, they periodically need to hover near the surface of the ocean and run their diesel engines to replenish the batteries.

They use a "snort mast" to extend above the water to draw in air. This dustbin-sized piece of kit has a radar signature detectable to Merlin helicopters.

The Merlin Mk2 fleet of helicopters entered service in 2014 as an upgrade for the original 1990's Mk1 naval version. It is the Royal Navy's principal airborne anti-submarine warfare capability.

There are 30 Mk 2 aircraft in the fleet and each one carries a crew of five. They can be armed with Sting-Ray Torpedoes, Mk11 Depth Charges and the M3m .50 Calibre machine gun.

A Ministry of Defence spokesperson said: "We do not comment on operational matters of this kind, but can confirm that robust measures are in place to protect HMS Queen Elizabeth and the ships of the UK Carrier Strike Group."

Since the incident in June, HMS Queen Elizabeth has led the CSG through the Suez Canal. The group is thought to be about to enter the Indian Ocean, on the next phase of its eight-month deployment to the Indo-Pacific.

## Military chief reveals secret new role for special forces against China and Russia

Larisa Brown, Defence Editor Saturday July 17 2021, 12.01am, The Times

 $\underline{https://www.thetimes.co.uk/article/military-chief-reveals-secret-new-role-for-special-forces-against-china-and-russia-hgbdwcsg7$ 

Britain's special forces will take on a new covert mission against China and Russia as they shift their focus to countering "big state adversaries", a senior military chief has revealed.

Brigadier Mark Totten said that the SAS and SBS would have more time and assets for "higher risk" counterstate tasks requiring more detail, planning and specialist expertise. The Royal Marines will take over the units' traditional roles.

Army sources said special forces might be given "politically treacherous" tasks such as training the navies of countries near the South China Sea to better defend against Chinese hostility.

Totten is in charge of a 4,000-strong "future commando force" of Royal Marines who will "burden-share" with Britain's elite units. They will base themselves in small numbers around the world carrying out counterterrorism operations, deterring mercenaries and responding to crises.

They will also use technology such as fish drones and artificial intelligence, and carry out "deception" operations with fake signals or diversionary forces to confuse an enemy.

Totten, who joined the Marines in 1998, said: "What we will be able to do is allow [special forces] to focus on more difficult, more complex, counter-Russia, counter-China [tasks]. It takes real specialist expertise, so we will allow them to have more time and people to address those and we can conduct some of the tasks, such as maritime counterterrorism for example, or partnered operations, where it is difficult, where there is a higher risk."

His comments are the first official acknowledgment that special forces will be tasked with tackling the threat from China and Russia. Normally the government does not comment on the activities of the troops, although earlier in the year the head of the army, General Sir Mark Carleton-Smith, admitted they would be asked to take on "hostile states" more generally.

It is thought the highly secretive operations could involve troops operating alongside MI6 to mount surveillance against Chinese and Russian intelligence and military units. Part of their job will be to track adversaries and build a picture of the changing and "accelerating" nature of the threat.

An army source said: "You're not going to get a gang of guys running around China."

However, the source said they could, for example, pop up around the South China Sea to train other navies in sensitive situations.

"You could send 25 guys from special operations to Africa carrying out counterterrorism and send four guys from the SAS to somewhere in the South China Sea as this would need to be lower profile and is politically more treacherous." Totten, who has served tours of Iraq and Afghanistan, said melting ice caps in the Arctic could open sea routes for Russia and China, adding: "There's a big geopolitical shift there so why wouldn't we embed the commando force up there to be ready to react?" Royal Marines will also be deployed east of Suez and could go to the Indo-Pacific ready for any conflicts that may arise. He said they could provide teams that could conduct training and "if there is a crisis that bubbles up we've got a footprint on the ground."

At present Marines have to deploy from RAF Brize Norton, Oxfordshire, or from Plymouth, and sometimes the critical moment has passed before they can arrive.

They could also act as a deterrent to the Wagner Group, Russian mercenaries believed to be carrying out the Kremlin's bidding, by having a presence in countries where they would not normally be.

"I'm not saying that we will move into a direct confrontation as in military to mercenary but . . . you don't make it easy for them because they have to think about what we are doing and what we will see," he said, adding that it was an "indirect" way of taking them on.

The army will also get a Rangers regiment for special operations, easing pressure on the SAS. Modelled on the US Green Berets, it will have its first mission in Africa.

The role of Britain's special forces has always been highly secretive (Larisa Brown writes). The government does not deny or confirm their operations. The highly-trained troops carry out the most dangerous missions, including behind-the-lines operations, undercover raids, counterterrorism, hostage rescue, reconnaissance and surveillance.

After the Manchester Arena terrorist attack in May 2017, members of the Special Air Service (SAS) were spotted on the streets alongside police carrying out raids. Elite soldiers were also deployed to Syria to help in the fight against Islamic State, along with missions in countries like Libya, Afghanistan and more recently Mozambique.

A shift to focusing on threats from hostile states such as China and Russia comes amid concerns that such states are becoming more brazen in their attacks.

The line between peace and war is becoming increasingly blurred, with states using deniable proxy forces, cyberattacks, and crude ways of sowing doubt and confusion such as misinformation campaigns and GPS "spoofing" that can take ships off course. Ministers have accused Russia of not playing by the "international rulebook".

It is thought that the highly-secretive special forces operations could involve troops operating alongside MI6 to mount surveillance operations against Chinese and Russian intelligence and military units. Part of their job will be to track adversaries and build a picture of the changing and "accelerating" nature of the threat.

 $\underline{\text{https://www.thetimes.co.uk/article/military-chief-reveals-secret-new-role-for-special-forces-against-china-and-russia-hgbdwcsg7}$ 

## US plots spy base in UK to counter space threats from Russia and China [Not another one]!

Defence Secretary Ben Wallace said the radar system would focus not on 'wrecking space but defending and protecting space'. By Poppy Wood

July 17, 2021 10:33 am(Updated 11:30 am)

https://inews.co.uk/news/uk/us-spy-base-uk-space-satellite-threats-russia-china-1108675?

The US has announced plans to build a space base in the UK in a bid to stave of "threats" posed by Russia and China and to probe deep space.

The US Space Force is developing a global radar system that can identify potential "targets" the size of footballs up to 22,000 miles away.

Three sites have been earmarked as sites for the new scheme, including one in southern England or Scotland, and two more in Australia and Texas. Current plans are for the first base to be operational by 2025.

Each site is set to house between "10 and 15 satellite dishes for tracking" and "four to six for transmitting", each measuring around 15 metres in diameter.

The Ministry of Defence said the new radar capability has the potential to make space "safer and more secure", amid growing concerns about congestion and competition in space.

Defence Secretary Ben Wallace and other UK defence chiefs visited the US Space And Missile Systems Center in Los Angeles this week to discuss the plans, known as Deep Space Advanced Radar Capability - or DARC.

Speaking at the event, Lieutenant Colonel Jack Walker said the new system was "necessary because we want to keep chain-of-custody of targets that could threaten our systems that are in geosynchronous orbit".

He told Sky News: "It could be satellites or it could just be debris from rocket bodies from other launches."

Air Chief Marshal Sir Mike Wigston, the head of the Royal Air Force, added that it would help the UK "defend our critical infrastructure in space".

"Right now, there are countries like Russia and China that are doing things, developing systems that are ... a threat to satellites that we rely on in our day-to-day lives," he said.

Both the US and Britain have accused Russia and China of developing weapons that can be used to take out satellites in recent years. Last year, 1,000 new satellites were launched into space, including 10 by the US military.

The US already operates an early warning system to detect ballistic missiles in space, including a service at RAF Fylindales in North Yorkshire.

However, it can only detect objects around 12,400 miles away, and is therefore far less powerful than DARC would be.

Speaking at the event in California, Mr Wallace said the new radar system would focus not on "wrecking space but defending and protecting space".

War in space is a growing threat – with hypersonic missiles and lasers to shoot down satellites

"It wouldn't be like Star Wars or Moonraker with lasers firing all over the place... I suspect in a major conflict, space assets would be targeted. So we have to invest and prepare today to make sure we have alternatives," he added.

A Ministry of Defence spokesperson said: "This new radar capability has the potential to make space safer and more secure, helping to protect our satellite system by tracking and monitoring objects.

"We are exploring our potential partnership with the USA on DARC and discussions so far have been positive."

https://inews.co.uk/news/uk/us-spy-base-uk-space-satellite-threats-russia-china-1108675?

## Putin offers US his foreign bases to spy on Taliban

Marc Bennetts, Moscow | The Sunday Times Sunday July 18 2021, 6.00pm, The Times

https://www.thetimes.co.uk/article/putin-offers-us-bases-in-central-asia-to-spy-on-taliban-vkhl93gzp

A Russian newspaper suggested that bases in Kyrgyzstan and Tajikistan has been offered to the US

The Kremlin has unexpectedly offered Washington the use of its military bases in Central Asia to gather intelligence from Afghanistan.

President Putin is said to have made the proposal during his summit meeting with President Biden in Geneva last month.

The Kommersant newspaper cited sources to claim that Putin, 68, suggested that the United States military use bases in Kyrgyzstan and Tajikistan to collect information, including through drones flown across the border, on the security situation in Afghanistan. It is unclear whether any US troops would be stationed permanently at the bases.

Russia's biggest foreign base, with about 6,000 soldiers, is in Tajikistan. Russia also has a smaller base in Kyrgyzstan, about 500 miles away from the Afghan

Both countries are former Soviet states and members of the Collective Security Treaty Organisation, a Russian-led military bloc.

The daily newspaper said that Washington had not given a final answer to the proposal, while the Kremlin has not commented on the report.

The Taliban has seized large swathes of Afghanistan as America prepares to pull out the last of its forces by September 11. The Islamist group recently claimed to control about 85 per cent of the country.

The withdrawal of the US troops after 20 years poses a dilemma for the Kremlin.

Moscow fears that the rapid advance of the Taliban could spark turmoil in Central Asian states near the Russian border. Putin said last year that a US military presence in Afghanistan had helped bring stability to the country.

The Kremlin is also concerned, however, that any redeployment of US troops in the region could pose a threat to its national security. Moscow said last week that it had "directly and bluntly" warned the US not to open new military bases in former Soviet countries that neighbour Afghanistan. It said that such a move would be "unacceptable" for Russia.

Antony Blinken, 59, the US secretary of state, held talks recently with the foreign ministers of Tajikistan and Uzbekistan as Washington tries to maintain a security presence in the region.

Analysts say, however, that neither country would be able to host a US base without approval from Russia.

Sergei Lavrov, the Russian foreign minister, said on Friday that the "hasty withdrawal" of US and Nato forces from Afghanistan threatened the future of the country.

He also said that the crisis had exacerbated the threat of terrorism and increased drug trafficking to "an unprecedented level".

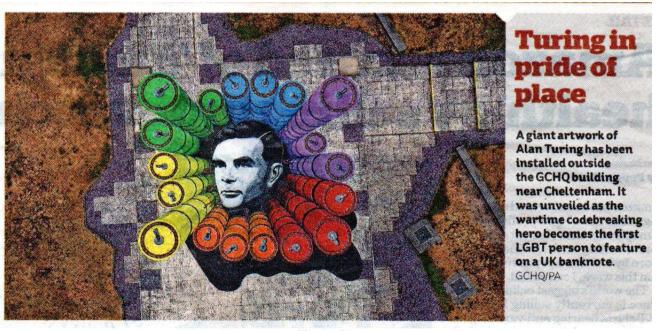
The Kremlin has urged Afghanistan's pro-western government to negotiate with the Taliban, while Moscow has said that it wants to help kickstart talks between the warring sides.

A Taliban delegation visited Moscow this month for talks. The Kremlin said that the Islamist group had pledged not to attack its neighbours. The assurance did little to assuage Russian fears about instability.

Military drills were held in Tajikistan last week involving combat helicopters and 1,000 troops. The Izvestia newspaper reported that joint exercises were scheduled to be held with the Tajik military, as well as in neighbouring Kyrgyzstan and Uzbekistan, next month and in September.

Those drills will involve motorised rifle and mountain units, special forces, artillery, as well as Russia's S-300 missile systems.

https://www.thetimes.co.uk/article/putin-offers-us-bases-in-central-asia-to-spy-on-taliban-vkhl93gzp



[Thanks 'E']

## **Morse Stations**

All frequencies listed in kHz. Freqs are generally +- 1k

This is a representative sample of the logs received, giving an indication of station behaviour and the range of times/freqs heard. These need to be read in conjunction with any other articles/charts/comments appended to this issue.

## **Morse - Number Stations**

M01/3 XIV MCW, hand (025 sched for May - Aug). Will change to M01/2 sched ID 463 for Sept - Oct.

Use of the variant formats appears to have ceased - At least for now. Four variant formats have been identified.

Standard Format:	$197 \text{ (R4m)} 117 117 30 30 = 93447 \dots 20478 = 117 117 30 30 000$	(Still the most commonly used format)
Variant Format 1:	197 (R4m) 147/30 147/30 78902 86083 147/30 000	(Not in use)
Variant Format 2:	$197 (R4m) 521=30 = 521=30 = 46547 \dots 88305 = 521=30 = 521=30 0=0=0$	(Not in use)
Variant Format 3:	$463 \text{ (R4m) } 127  30 = = = 84820 \dots \text{LG } 82607 = = = = 127  127  30  30  000$	(Not used at all in 2020)
Variant Format 4:	$197 (R4m) 589 589 = 30 30 = 40728 \dots 58918 = 589 589 = 30 30 000$	(Logged only once in Jan / Feb)

A new development noted in July & August is the occasional change to the ending where 0.0.0. is sent using periods in place of the usual 000

#### July 2021:

4905	2000z 2000z 2000z 2000z 2000z 2000z 2000z	01 Jul 06 Jul 08 Jul 20 Jul 22 Jul 27 Jul 29 Jul	'025' 143 30 = 43078 05994 = Goo '025' <b>917 48</b> = 61840 97328 = Fai '025' 299 30 = 56473 87765 = Goo '025' 270 30 = 77401 = Goo '025' 531 30 = 87598 37689 = Goo	ir, fast. Longish pauses between grps. Errors in call-up tod, slow. Poor CW, irregular. Start DK sent as 143/143 ir / good, fast. DK/GC 917 48 at start – 817 30 at end tod, fast. Errors in call-up, the message sent perfectly! tod, fast. (Missed first two grps). Error grp25 repeat tod, fast. Grps27-28 repeated. Otherwise no errors tod, fast. Missed start. Ending DK sent as 385 685	BR BR BR BR BR BR	THU TUE THU TUE THU TUE THU
5280	1800z 1800z 1800z 1800z 1800z	08 Jul 13 Jul 22 Jul 27 Jul 29 Jul	'025' Very weak – No useful copy '025' Very weak – No useful copy '025' Very weak – No useful copy NRH '025' 130 30 = = 96209 = = V.V.	Weak, fast. Ending heard via Polish SDR	BR BR BR BR	THU TUE THU TUE THU
6435	1500z 1500z 1500z 1500z	10 Jul 17 Jul 24 Jul 31 Jul	'025' 331 30 = = 46372 47382 = Fair '025' 306 30 = = 46537 57832 = We	eak / fair, med-fast. Excellent Morse. No noted errors ir, fast. Many groups run together with no pause eak, fast. Many grps joined as single stream. Poor sigs ir, fast. Several errors noted. Ended 0.0.0.	BR BR BR	SAT SAT SAT SAT
6780	0700z	18 Jul	'025 806 30 57483 46573 Fai	ir/Good, med-fast. Grp26 sent twice. = = not sent	BR	SUN
August 2	<u> 2021:</u>					
4905	2000z 2000z 2000z 2000z 2000z 2000z	03 Aug 10 Aug 12 Aug 19 Aug 26 Aug 31 Aug	'025' 963 30 == 34345 == Goo '025' 567 30 == 84937 71645 == Goo '025' 501 30 == 47562 68234 == Goo NRH	bod, fast. Good Morse. Two errors noted grp01 & 26 bod, slow. Missed first part of transmission bod, fast. High noise. Numerous errors. Ended 0.0.0. bod, fast High noise / local QRM.  dir, fast. Excellent Morse. = = missing at start & end	BR BR BR BR BR	TUE TUE THU THU THU TUE
5280	1800z 1800z 1800z 1800z 1800z 1800z	03 Aug 10 Aug 12 Aug 17 Aug 26 Aug 31 Aug	NRH '025' Weak, slow. Some groups readable b '025' Call-up started weak / fair. Faded to v '025' Very Weak – No useful copy '025' Very weak, fast. No useful copy '025' 227 30 = =		BR BR BR BR BR	TUE TUE THU TUE THU TUE
6435	1500z 1500z 1500z 1500z	07 Aug 14 Aug 21 Aug 28 Aug	NRH '025' 214 30 ==		BR BR BR BR	SAT SAT SAT SAT

 $\underline{\textbf{M01a}}$  (From Feb 2016 M01a has been redefined to cover all M01 variants - excepting M01b)

A number of regular schedules have been reported & Logged by Edd Smith – See ENIGMA 2000 Newsletter 116 for details.

Logs are shown as continuous. In practice there are often pauses between lines - Often quite lengthy pauses.

M01a Schedule Wednesday 14 July		ay 14 July						
	9129	0530 (IP)	- 0533z	14 Jul	498 (x3) 53173 (x2) (Repeated)	(Via SDR Novosibirsk)	E.SMITH	WED
					111 0 0 0			
	9192	0530z		14 Jul	NRH			

7692	0540z	14 Jul	NRH
9421	0620z	14 Jul	Not Monitored
8111	0630z	14 Jul	Not Monitored
9175	0710z	14 Jul	NRH
8078	0720z	14 Jul	NRH

 $\underline{\textbf{M12}} \;\; \textbf{IB} \;\; \textbf{ICW, some MCW} \, / \, \textbf{CW, short 0. Reuses many freqs year on year.}$ 

New ID's may be only for the month/sched shown, but not necessarily unknown. The reason for their reuse, some after long periods of time is unknown.

### Asiatic M12 Scheds

10807/10207/9207	0700/20/40z 0700/20/40z	01 Jul 13 Jul	822 000 822 1 (419 142)	19655etc.	(Via Japan SDR) (Via Hong Kong SDR)	HFD RNGB	THU TUE
15881/14781/13481	0210/30/50z	26 Jul	847 1		(Via USA SDR)	HFD	MON
11148/10648/9148	0700/20/40z	19 Aug	161 1 (926 122)	95200 99060etc.	(Via Hong Kong SDR)	HFD/RNGB	THU

### European M12 Logs

<u>July 2021:</u>	New scheds in bold	type				
7475/8075/9275	0030/0050/0110z 0030/0050.0110z 0030/0050/0110z 0030/0050/0110z 0030/0050/0110z	02 Jul 06 Jul 13 Jul 27 Jul 30 Jul	402 000 402 1 (4108 51) 402 1 (3628 86)	40921 80915 47111 87862 000 000 59836 35915 07806 42517 000 000 47939 90929 82014 45721 000 000 47939 90929 82014 45721 000 000	Gert/HFD Gert Gert Gert Gert	FRI TUE TUE TUE FRI
9284/8084/7584	2210/30/50z 2210/30/50z 2210/30/50z 2210/30/50z 2210/30/50z 2210/30/50z 2210/30/50z	03 Jul 07 Jul 10 Jul 14 Jul 24 Jul 28 Jul 31 Jul	,	42760 52519 88752 44740 000 000 42760 52519 88752 44740 000 000 72396 16941 99928 34204 000 000 02004 52273 80888 79914 000 000 89787 43370 43458 22092 000 000 89787 43370 43458 22092 000 000	Gert/HFD Gert Gert Gert BR/Gert Gert Gert	SAT WED SAT WED SAT WED SAT
9317/10484/11552	0530/0550/0610z 0530/0550/0610z 0530/0550/0610z	06 Jul 13 Jul 27 Jul	135 1 (1789 107)	08963 79174 78229 08308 000 000 23940 95904 46101 65964 000 000 10244 86178 01813 99207 000 000	Gert Gert Gert	TUE TUE TUE
10767/10167/9267	2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z	02 Jul 03 Jul 09 Jul 10 Jul 16 Jul 17 Jul 23 Jul 24 Jul 30 Jul 31 Jul	712 1 (366 92) 712 1 (366 92) 712 000 712 000 712 000 712 000 712 000 712 000 712 000 712 000 712 000	46481 91068 08536 38547 000 000 46481 91068 08536 38547 000 000	BR/Gert/HFD Gert BR/Gert Gert BR/Gert Gert BR/Gert Gert BR/Gert Gert Gert Gert	FRI SAT FRI SAT FRI SAT FRI SAT FRI SAT
12162/11566/10711	1710/30/50z 1800/20/40z 1710/30/50z 1700/20/40z 1710/30/50z 1700/20/40z 1800/20/40z 1710/30/50z 1710/30/50z 1700/20/40z 1800/20/40z	07 Jul 08 Jul 14 Jul 15 Jul 21 Jul 22 Jul 22 Jul 28 Jul 29 Jul 29 Jul	546 1 (2901 112) 546 1 (6955 107) 546 1 (6889 108) 546 1 (3313 110) 546 1 (8544 104) 546 1 (6531 106) 546 1 (7422 110) 546 1 (7698 109)	34797 33387 66829 52582 000 000 52183 54333 08348 75459 000 000 50063 96283 43093 82192	Gert BR BR/E.SMITH/Gert BR/Gert BR BR BR/Gert BR/Gert BR/Gert	WED THU WED THU WED THU WED THU THU THU THU
12217/10817/	2000/20/40z 2000/20/40z 2000/20/40z 2000/20/40z 2000/20/40z 2000/20/40z	01 Jul 05 Jul 12 Jul 19 Jul 26 Jul 29 Jul	617 000 617 1 617 000 617 1 (228 61) 617 000 617 000	23662 34339	Gert BR/HFD BR/Gert BR BR/Gert Gert	THU MON MON MON MON THU
13381/12181/10781	2110/30/50z 2110/30/50z 2110/30/50z 2110/30/50z 2110/30/50z 2110/30/50z	01 Jul 05 Jul 08 Jul 12 Jul 15 Jul 19 Jul	317 1 (673 97) 317 000 317 000 317 1 (894 80) 317 1 (894 80) 317 000	41622 02286 83849 15454 000 000 11260 47060 36155 82547 000 000 11260 47070 36155 82547 000 000	BR/Gert BR/HFD BR BR/Gert BR/Gert BR	THU MON THU MON THU MON

	2110/30/50z 2110/30/50z 2110/30/50z	22 Jul 26 Jul 29 Jul	317 000 317 1 (847 97) 317 1 (847 97)	15414 26080 97024 98569 000 000 15414 26080 97024 98569 000 000		BR BR/Gert BR/Gert	THU MON THU
13386/12189/11491	1110/30/50z 1110/30/50z	01 Jul 08 Jul	725 1 (972 80) 725 1	39481 44408 13485 18062 000 000		Gert HFD	THU THU
13979/13379/12179	1110/30/50z 1600/20/40z 1600/20/40z 1600/20/40z 1600/20/40z 1600/20/40z 1600/20/40z 1600/20/40z	22 Jul 04 Jul 07 Jul 11 Jul 14 Jul 18 Jul 21 Jul 28 Jul	725 1 (4998 96) 931 000 931 1 (4752 73) 931 1 (4752 73) 931 000 931 000 931 1 (3736 60) 931 000	45700 96955  02363 12644 20578 79440 000 000 02363 12644 20578 79440 000 000 38322 62770		BR  HFD Gert BR/Gert Gert Gert BR Gert Gert	SUN WED SUN WED SUN WED WED
14377/13461/12114		01 Jul 08 Jul 12 Jul 19 Jul 22 Jul 26 Jul 29 Jul		51686 25361		BR/Gert BR BR HFD BR Gert BR	THU THU MON MON THU MON THU
16284/14984/	1600/20/40z 1600/20/40z 1600/20/40z	12 Jul 26 Jul 29 Jul	293 000 293 000 293 00			Gert Gert Gert	MON MON THU
Out of Course Tran	ısmissions – Reporte	d as trainin	ıg				
8094/9142/10256	0830/0850/0910z	16 Jul	471 1 (6059 280)	51626 83247 11888 04417 000 000	Training transmission?	E.SMITH	FRI
9338	1121z (IP) 1155z	27 Jul 27 Jul		40481 30025 71532 20360 000 000 55366 38299 40288 07626 000 000	Fair Fair	E.SMITH E.SMITH	
10427	1215z	27 Jul	793 1 (2857 290)	55366 38299 40288 07626 000 000	Fair	E.SMITH	TUE
11574	1235z	27 Jul	793 1 (2857 290)	55366 38299 40288 07626 000 000	Fair	E.SMITH	TUE
Nothing on these free	quencies in the afterno	oon or eveni	ing.				
August 2021:							
6784/8184/9342	0030/0050/0110z 0030/0050/0110z 0030/0050/0110z 0030/0050/0110z 0030/0050/0110z	13 Aug 17 Aug 20 Aug 24 Aug 27 Aug	713 1 (610 94) 713 1 (610 94) 713 1 (610 94) 713 000 713 000	41625 27750 75862 63639 000 000 41625 27760 75862 63639 000 000 41625 27760 75862 63639 000 000		Gert Gert/HFD Gert Gert Gert	FRI TUE FRI TUE FRI
9052/8052/6952	2210/30/50z 2210/30/50z 2210/30/50z 2210/30/50z 2210/30/50z 2210/30/50z 2210/30/50z	04 Aug 07 Aug 11 Aug 14 Aug 18 Aug 25 Aug 28 Aug	992 1 (1547 122) 992 1 (1547 122) 992 1 (1215 116) 992 1 (1215 116) 992 1 (5328 78) 992 000 992 000	41759 56379 81388 43707 000 000 03209 77109 76968 40025 000 000		BR BR/Gert/HFD BR/Gert Gert BR/Gert BR/Gert Gert	WED SAT WED SAT WED WED SAT
9317/10484/11552	0530/0550/0610z 0530/0550/0610z 0530/0550/0610z	10 Aug 17 Aug 24 Aug	135 1 (4143 113)	11473 96418 56424 96975 000 000 65661 70414 99548 75125 000 000 58597 83433 53405 93153 000 000		Gert Gert Gert	TUE TUE TUE
10314/9114/8014	2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z	06 Aug 07 Aug 13 Aug 14 Aug 20 Aug 27 Aug 28 Aug	310 000 310 000 310 000 310 000 310 000 310 1 (4148 120) 310 1 (4148 120)	96596 26497 96596 26497	Very weak Very weak	Gert/HFD BR/Gert BR/Gert Gert Gert Gert Gert	
12148/10648/9148	2000/20/40z 2000/20/40z 2000/20/40z 2000/20/40z 2000/20/40z 2000/20/40z 2000/20/40z 2000/20/40z 2000/30/50z	02 Aug 05 Aug 09 Aug 12 Aug 16 Aug 19 Aug 23 Aug 26 Aug 30 Aug	374 1 (1228 89) 374 1 (1228 89) 374 000 374 000 374 1 (597 59) 374 1 (597 59) 374 000 374 000 374 1 (302 90)	79023 37006 79023 37006 18567 95694 43161 88001 000 000 18567 95694 43161 88001 000 000 79697 62814		BR BR/HFD BR/Gert BR/Gert BR/Gert BR/Gert BR/Gert BR	MON THU MON THU

12162/11566/10711	1710/30/50z	04 Aug	546 1 (4051 111)	82990 11340	BR	WED
	1700/20/40z	05 Aug	546 1 (1874 113)	44449 72426	BR	THU
	1710/30/50z	11 Aug	546 1 (4586 104)	04144 40833 75659 54125 000 000	BR/Gert	WED
	1700/20/40z	12 Aug	546 1 (6733 110)	55418 30724 99697 13873 000 000	Gert	THU
	1800/20/40z	12 Aug	546 1 (8933 112)	38043 24355 73302 35750 000 000	BR/Gert	THU
	1710/30/50z	18 Aug	546 1 (9561 109)	20830 50870 35326 00285 000 000	Gert	WED
	1700/20/40z	19 Aug	546 1 (6192 106)		BR/Gert	THU
	1800/20/40z	19 Aug	546 1 (1185 105)	20869 27951 46725 47778 000 000	Gert	THU
	1710/30/50z	25 Aug	546 1 (6766 104)	91335 43278 22541 63388 000 000	BR/Gert	WED
	1700/20/40z	26 Aug	546 1 (1910 111)	56409 17155 87710 58225 000 000	BR/Gert	THU
	1800/20/40z	26 Aug	546 1 (9821 110)	20702 43916 33160 56350 000 000	BR/Gert	THU
12214/11014/9914	2110/30/50z	02 Aug	209 000		BR	MON
	2110/30/50z	05 Aug	209 000		BR	THU
	2110/30/50z	09 Aug	209 1 (126 71)	27638 72757 19043 76150 000 000	BR/Gert	MON
	2110/30/50z	12 Aug	209 1 (126 71)	27638 72757 19043 76150 000 000	BR/Gert	THU
	2110/30/50z	16 Aug	209 1 (126 71)	27638 72757 19043 76150 000 000	BR/Gert	MON
	2110/30/50z	19 Aug	209 1 (126 71)	27638 72757 19043 76150	BR/Gert/HFD	THU
	2110/30/50z	23 Aug	209 000		BR/Gert	MON
	2110/30/50z	26 Aug	209 000		BR/Gert	THU
13386/12189/14864	1110.30/50z	05 Aug	725 1 (8463 98)	60727 40146	BR	THU
	1110/30/50z	19 Aug	725 1 (5600 91)	65250 65745 77786 75590 000 000	BR/Gert	THU
14377/13461/12114		05 Aug	317 1 (3336 105)	28958 46802	BR	THU
	1130/1150/1210z	09 Aug	317 1 (1245 96)	38974 35087 41465 54423 000 000	Gert	MON
	1130/1150/1210z	12 Aug	317 1 (8301 109)	89300 08438 16762 50658 000 000	Gert	THU
	2000/20/40z	12 Aug	317 1 (8301 109)	89300 08438	BR	THU
	1130/1150/1210z	16 Aug	317 1 (1721 92)	01230 94585 18204 71201 000 000	Gert	MON
	2000/20/40z	19 Aug	317 1 (5160 110)	45840 61942	BR	THU
	2000/20/40z	26 Aug	317 1 (5048 108)	17830 98943	BR	THU
14681/13881/13381	1600/20/40z	01 Aug	683 000		Gert/HFD	
	1600/20/40z	04 Aug	683 1 (667 89)	73830 14543	BR	WED
	1600/20/40z	08 Aug	683 1 (667 89)	73830 14543	BR	SUN
	1600/20/40z	18 Aug	683 1 (5574 97)	35173 59676 68653 54338 000 000	Gert	WED
	1600/20/40z	22 Aug	683 1 (5574 97)	35173 59676 68653 54338 000 000	Gert	SUN
	1600/20/40z	25 Aug	683 1 (5574 97)	35173 59675	BR/XAH	
	1600/20/40z	29 Aug	683 1 (5574 97)	35173 59676 68653 54338 000 000	Gert	SUN
16251/14951/14451	1600/20/40z	02 Aug	294 000		AB	MON
	1600/20/40z	05 Aug	294 000		AB/HFD	
	1600/20/40z	09 Aug	294 1 (7983 660)	85031 93585 93305 20301 000 000	BR/Gert	
	1600/20/40z	16 Aug	294 000		BR	MON
	1600/20/40z	19 Aug	294 000		BR/Gert	THU
	1600/20/40z	26 Aug	194 1 (5945 98)	20764 07998 96394 54372 000 000	Gert	THU

#### M12 9284/8084/7584kHz 2210/2230/2250z 10 July 2021

 $295\ 295\ 295\ 1\ (R2m)\ 5368\ 106\quad 5368\ 106$ 

 42760
 52519
 10604
 31496
 00444
 08482
 67866
 55550
 13547
 92512

 14883
 02825
 74275
 47673
 24947
 66766
 80901
 76074
 14216
 75409

 44203
 76776
 60683
 64896
 09686
 79872
 94501
 17846
 19758
 69629

 25270
 92913
 23745
 82315
 63112
 08065
 46622
 91883
 01640
 01056

 73413
 84618
 93417
 59870
 55611
 74780
 64650
 86074
 26459
 20823

 30377
 37534
 08428
 09603
 31667
 85428
 71203
 33360
 88426
 39017

 57533
 31670
 71406
 33957
 07733
 01812
 78163
 34039
 69934
 48764

 52844
 69572
 21747
 47015
 29699
 93322
 55989
 38463
 05028
 81481

 46351
 55611
 34979
 29455
 15351
 37606
 61683
 28180
 47962

Courtesy Gert

#### M12 12162/11566/10711kHz 1710/1730/1750z 14 July 2021

 $546\ 546\ 546\ 1\ (R2m)\ 6955\ 107\ 6955\ 107$ 

34797 33387 95636 95470 06651 98099 08610 71509 73626 22832 81563 77187 42496 09538 79472 60489 70771 93982 00735 59756 27545 87836 73390 44777 70618 61027 63826 95313 24515 66831 02988 20358 66560 44120 81545 24452 03717 33044 81736 59910 15522 87535 76737 28486 04781 73279 35350 58588 67686 23353 75059 77605 44841 22232 43509 37829 40731 84852 71433 19263 90029 49056 99411 47423 84704 28267 45199 30447 83283 87328 44034 42977 57372 47417 43044 42976 45973 94844 00662 10569 13154 13689 23212 07532 98976 46313 46374 14432 68042 78542 44130 23480 49455 50460 63205 07459 61998 04971 89638 64596 63836 12179 58984 30465 01752 66829 52582 000 000

Courtesy E.SMITH

#### M14 IA MCW / ICW Short 0

#### July 2021:

10243	0520z 0520z	16 Jul 19 Jul	952 (737 65) = 50855 53392 24731 19840 737 65 00000 952 (607 56) = 99591	CW	AB HFD	FRI MON
12211	0500z 0500z	16 Jul 19 Jul	952 (737 65) = 50855 53392 24731 19840 737 65 00000 952 (607 56) = 99591	CW	AB HFD	FRI MON
14878	0930z	26 Jul	617 (502 148) = 79308 31423 33517etc. Repeat of 25 Jul msg	<u>5</u> .	RNGB	MON
16347	0930z 0930z	10 Jul 25 Jul	617 (502 148) 617 (502 148) = Repeat of 10 Jul msg.	(SDR Utwente)	ER/HFD ER	SAT SAT

#### **August 2021:**

10243	0520z 0520z 0521z 0520z 0520z 0520z	02 Aug 05 Aug 16 Aug 19 Aug 23 Aug 26 Aug	952 (368 51) = 49148 81144 15944 83020 368 51 00000 925 for 1m10s followed by several restarts, then off at 0523z 952 (783 52) = 77870 27707 08289 84651 783 52 00000 (Late 952 (618 52) = 80677 82359 16158 54329 618 52 00000 952 (786 52) = 61829 55371 18605 54830 786 52 00000 952 (183 62) = 19479 18880 55806 75027 183 62 00000	start) [Note 1]	CW CW CW CW CW	AB AB AB AB AB	MON THU MON THU MON THU
12211	0500z 0500z 0500z 0500z 0500z 0500z	02 Aug 05 Aug 16 Aug 19 Aug 23 Aug 26 Aug	952 (368 51) = 49148 81144 15944 83020 368 51 00000 925 (304 51) = 33120 71838 30961 04678 304 51 00000 952 (783 52) = 77870 27707 08289 84651 783 52 00000 952 (618 52) = 80677 82359 16158 54329 618 52 00000 952 (786 52) = 61829 55371 41827 4456 [off] 952 (183 62) = 19479 18880 55806 75027 183 62 00000	[Note 2]	CW CW CW CW CW	AB AB AB AB AB	MON THU MON THU MON THU
16347	0930z	10 Aug	617 00000 (R4m)	(SDR Utw	ente)	ER	TUE

[Note 1: CW hiccups during 1st minute]

[Note 2: 952 long pause 952 long pause, normal after that]

[Note 3: Technical problems after group 36, off after group 45]

#### M14 12211kHz 0500z 02 August 2021

952 (R4m) 368 368 51 51 ==

368 368 51 51 00000

Courtesy AB

#### M14 10243kHz 0520z 19 August 2021

952 (R4m) 618 618 52 52 ==

618 618 52 52 00000

Courtesy AB

#### **M23** O ICW

No reports

## **Morse Stations - Not Number Related**

M51 XIX

3881//6825 100 grp 5-ltr messages with headers

No reports - M51b format in use

M51a (FAV22) Daily Mon – Fri & weekends. See NL 72 for details

3881//6825

1130 - 1212z	02 Aug	Lundi-Leçon	01-2/1 Codé	01-2/2 Clair,	01-2/3 Codé,	01-2/4 Clair (420 grps/hr)	BR	MON
1130 - 1201z	03 Aug	Mardi-Leçon	02-2/1 Codé	02-2/2 Clair,	02-2/3 Codé,	02-2/4 Clair (600 grps/hr)	BR	TUE
1130 - 1204z	04 Aug	Mercredi- Leçon	03-2/1 Codé,	03-2/2 Clair,	03-2/3 Codé,	03-2/4 Clair (720 grps/hr)	BR	WED
1130 - 1156z	05 Aug	Jeudi- Leçon	04-2/1 Codé,	04-2/2 Clair,	04-2/3 Codé,	04-2/4 Clair (840 grps/hr)	BR	THU
1130 - 1204z	06 Aug	Vendredi- Leçon	05-2/1 Codé,	05-2/2 Clair,	05-2/3 Codé,	05-2/4 Clair (960 grps/hr)	BR	FRI
0700z	14 Aug	SAMEDI 2/LEÇON N	NUMÉRO 1/1	VITESSE 420	CODÉ =		AB	SAT
	_	SAMEDI 2/LECON N	NUMÉRO 2/1	VITESSE 420	CLAIR =		AB	SAT

[Returned to non-stop 5-character groups]

SAMEDI 2/LEÇON NUMÉRO 1/2 VITESSE 600 CODÉ = AB SAT SAMEDI 2/LEÇON NUMÉRO 2/2 VITESSE 600 CLAIR = AB SAT

VVV VVV VVV DE FAV22 FAV22 FAV22 QLH 3881/6825 KHZ

SAMEDI 2/LEÇON NUMÉRO 1/1 VITESSE 420 CODÉ = FSIIF VNFJD BCTWL CBXND QIWUD CNCZZ MNHLP YVBFS QEAXC 32569 VCSGW "VA/ QRXVC VMFKE PTOIY MJFSD AQEZC VNFMG LGKHI POUIY 87965 NCJKW .?AS', NMGKT LHPTO YHJJD RFNAR CBDVJ ZXSDW QAWOY OPIYU 45698 BCSHW .?,+' LGOTM VCGFB ZCSFW BGHUT LHKYP ERTWY QIUOF MVNFH 02368 BCSMW ?.ASVA, MBNCX VFGER POQAS XCFDE JGHNF LKWUE VBCND MLFKG 54796 BSHWL ='/.? ASQEX VMDSD EWGDD LBKGI

'.,?. NCDJE 25893 HDJEE LHKTP ZCXAQ BFGEE SHQUK KDLCX ASDWG VBNFK 26318 BSHWK 36980 KHJCM LGDHJ CBETJ AQWOT +

SAMEDI 2/LECON NUMÉRO 2/1 VITESSE 420 CLAIR =

AUJOURD'HUÏ, CES VALEURS, CETTE TRADITION, CETTE COHÉSION EXEMPLAIRE MAIS AUSSI CETTE INTÉGRATION RÉUSSIE FONT PARTIE DE LA RICHESSE NATIONALE. NOTRE JEUNESSE EST UN ATOUT POUR NOTRE PAYS ET POUR L'EUROPE ET JE SAIS COMBIEN NOS ARMÉES SAVENT DÉVELOPPER LEURS ÉNERGIES ET LEURS TALENTS. LA FRANCE AURA PLUS QUE JAMAIS BESOIN DEMAIN, DANS UN MONDE INSTABLE, D'ARMÉES DE TRÈS HAUT NIVEAU. J'ASSUMERAI PLEINEMENT LES RESPONSABILITÉS QUI SONT LES MIENNES POUR DÉFINIR, SOUS LA DIRECTION DU PRÉSIDENT DE LA RÉPUBLIQUE ET DU PREMIER MINISTRE, L'AVENIR DE NOTRE SYSTÈME DE DÉFENSE ET LES REFORMES QUI SONT NÉCESSAIRES À NOTRE PAYS ET À NOS ARMÉES AINSI QU'A LA VALORISATION DE NOS INDUSTRIES. +

#### CQ DE FAV22 VA

[Returned to non-stop 5-character groups]

VVV VVV DE FAV22 FAV22 FAV22 QLH 3881/6825 KHZ

SAMEDI 2/LEÇON NUMÉRO 1/2 VITESSE 600 CODÉ = DJKJF ERYRI VPLTO BCVDS ZXASQ MVLGK OYPUI GFHDJ CSRED 16580 BCJWI .,?AS= LMPOY CXRAE XVDRE NBFHG AWQES BCZXR BNFIR PGLRO .?.,' BCHDE 42369 LAPQI WNSYV VCSDW AQLFP RHFUS BCVDW NKGIR BCXWY 54783 CBHQA AR'., YHHBY CXDWE VNYEA AWQEV XVSFW MBFUR AWQLG RYUSN 14790 XMLPO ,.AS?AR AJAUW XCSAR LDOEJ GMNRY XBSTW DSEWX VNFJE LEPWM 65874 VZQJA +/AR., ASZXW CHYDE KFOLG VCRWT CXARQ MFYRU NFNFY AEQDS 12680 GBDHE /:.? VSFWG XASZW HDJWU LFPRO CXWRG LSHDF VXRAU CLNOP 54103 BCUEL ,.?'/ BCEUF LGPTO VZAXW +

SAMEDI 2/LECON NUMÉRO 2/2 VITESSE 600 CLAIR =

LE PRIX DU GRAND JURY REVIENT À DANIEL GRENON POUR "HARKIS SOLDATS ABANDONNÉS ". LE LIVRE RASSEMBLE DES TÉMOIGNAGES DE CES SOLDATS ET AUSSI D'OFFICIERS, "HOMMES D'HONNEUR ", 50 ANS APRÈS LES ACCORDS D'ÉVIAN. PRÉFACÉ PAR LE ROMANCIER ET DOCUMENTARISTE PIERRE SCHŒNDŒRFFER, "HARKIS, SOLDATS ABANDONNÉS "DONNE LA PAROLE À SIX HARKIS ET QUATRE "HOMMES D'HONNEUR ". 50 ANS APRÈS LA GUERRE D'ALGÉRIE, DANS CES TÉMOIGNAGES INÉDITS, ILS REVIENNENT SUR LEUR PASSÉ, OÙ HISTOIRE PERSONNELLE ET HISTOIRE SE SONT MÊLÉS. +

CQ DE FAV22 VA Courtesy AB

#### M51b Non-stop 5-character groups composed of M51a messages on 3881//6825kHz

#### 3881//6825

1307 (IP) - 1404z +	07 Aug	Non-stop 5-character groups composed of M51a messages	BR	SAT
1110 (IP) - 1145z +	08 Aug	Non-stop 5-character groups composed of M51a messages	BR	SUN
1949 (IP) – 2000z +	11 Aug	Non-stop 5-character groups composed of M51a messages	BR	WED
0455z (IP) +	14 Aug	Non-stop 5-character groups composed of M51a messages	AB	SAT

#### **M89** O

This is a summary of activity from the M89 stations.

#### Traffic & Operator Chat from M89

Traffic & Op. chat reported on the following freqs. (All in kHz).

3174	4002	5031	5543	6239	7160	9123
3964	4125	5123	5555	6312	7621	9128
3967	4164	5164	5556	6321	7653	
	4228	5178	5562	6333	7860	
	4235	5190	5566	6667		
	4312	5245	5578	6768		
	4315	5281	5600			
	4325	5325	5600.2			
	4378	5336	5635			
	4531	5343	5697			
	4536	5372	5742			
	4552	5410	5751			
	4576	5421	5790			
	4578	5431	5823			
	4631	5432	5896			
	4643	5445				
	4649	5454				
	4720					

#### New Scheds for Jul / Aug 2021: From logs submitted from JPL

4728	New frequency & Round Slip	First heard 11 July	V GAD(x3) DE CCE (x2) (R5) QSA ? QSV K (Hand sent)
4728	New frequency & Round Slip	First heard 12 July	V GAS(x3) DE FND (x2) (R5) QSA ? QSV K (Hand sent)
6543	New frequency for this Round Slip New frequency for this Round Slip	First heard 17 Aug First heard 27 Aug	V BSA5 (x3) DE TP4C (x2) V 8RVF (x3) DE CV4K (x2)

hart of M89 Freq	& Call signs heard in Jul / Aug 2021 New Scheds	shown in Bold Type	From logs submitted from JPL & F5JBR
Freq in KHz	<u>Call Slip</u>	Freq in kHz	Call Slip
3565//4718 3565//4718//6378//	V BSA5 (x3) DE TP4C (x2) 7045	5640//6320//6840	0//8290//8360 VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA
3565//6378//7045	V BSA5 (x3) DE TP4C (x2) V BSA5 (x3) DE TP4C (x2)	5640//6320//6840	0//8290//8360//10640 VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA
3850//4620/4860//5	5640//6320//6840 Q2M (x3) DE NYZ (x2) (R5) QSA ? K (R5)	6378//7045	V BSA5 (x3) DE TP4C (x2)
3964	VVV (x2) N6O (X3) DE (x2) KEM (x2)	6543 6543	V BSA5 (x3) DE TP4C (x2) V 8RVF (x3) DE CV4K (x2)
4620//4860//5640//	6840//8290//8360 VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K	6840//NRH 6840//8290	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K
4718//6378 4718//6378//7045	V BSA5 (x3) DE TP4C (x2) V BSA5 (x3) DE TP4C (x2)	7045//NRH	V BSA5 (x3) DE TP4C (x2)
4720//5150	V WNF(x3) DE FXM (x2) (R5) (Hand sent)	7045 7045//8073	V J9VQ (x3) DE DGM7 (x2) V J9VQ (x3) DE DGM7 (x2)
4728 4728	V GAD(x3) DE CCE (x2) (R5) QSA ? QSV K V GAS(x3) DE FND (x2) (R5) QSA ? QSV K	7620//8350	V WNF(x3) DE FXM (x2) (R5) (Hand Sent)
4860// 6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ?	8067	V HNS8 (x3) DE CL7Y (x2)
4860//5640//6320//	6840//8290//8360 VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA		
4860//5640//6320//	6840//8290//8360//10640 VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA		

3967	K6QG	1204z (IP) 19 Jul	NR 1379/EX 2003 BT	S7W3/N3U7 AR	(Remote tuner Hong Kong)	JPL	MON
4002		1226z (IP) 19 Jul	/EX 2024 BT	R1P3/W0E8 AR	(Remote tuner Hong Kong)	JPL	MON
4312		1454z (IP) 14 Aug	NR 1345 CK 61 79 0814 2240 I	RMKS 5022624 TO 5022620 BT	(Remote tuner Japan)	JPL	SAT
4531		1208z (IP) 12 Jul	NR 2152/EX 2018 BT	TJK5/M4S7 AR	(Remote tuner Taiwan)	JPL	MON
5123	DLP2	1312z (IP) 12 Jul	2SJA DE DLP2	N8XE DE DLP2 QSA ? K	(Remote tuner Taiwan)	JPL	MON
5245		1414z (IP) 14 Aug	NR 1787 CK 141 36 0814 2130	RMKS 2843429 TO 2843420 K	(Remote tuner Japan)	JPL	SAT
5281		1438z (IP) 14 Aug	NR 28092022 K		(Remote tuner Japan)	JPL	SAT
5372		309z (IP) 12 Jul	2100 RMKS 6192128 TO 6192	129 BT	(Remote tuner Taiwan)	JPL	MON
5421		1210z (IP) 19 Jul	NR 1381/EX 2009 BT	V95/8 AR	(Remote tuner Hong Kong)	JPL	MON
5454		1131z (IP) 14 Aug	NR 1065 HR WK NR 1065 K NR 0601 HR WK NR 0601 R K NR .156 CK 95 75 0814 1934 R		(Remote tuner Hong Kong)	JPL	SAT
5543		1358 (IP) – 1400z	27 Aug 1720 BT XLW4/5B2 4910/EX 2157 RMK 4920/EX 2157 RMK	S 1983 TO 1720 BT XLW4/5E		JPL	FRI
5555		1356 (IP) – 1358z	27 Aug IEC BT 74 BT 3D4N	N (Exercise related)	(Remote tuner Cangzhou)	JPL	FRI
5600.2		1411 (IP) - 1411z	27 Aug NR 6873 CK 141 36	0827 2230 RMKS 243427 TO 2	2943428 K (Remote Quzhou)	JPL	FRI
5790		1126z (IP) 14 Aug	NR 8679/EX 1924 RMKS 9114	TO 9267 BT PBT5/K4R1 AR K	(Remote tuner Hong Kong)	JPL	SAT
6312		1215z (IP) 19 Jul	NR 1752/EX 2015 BT	D5S1/T3SB AR	(Remote tuner Hong Kong)	JPL	MON
6321		1210z (IP) 03 Jul	NR 5512/EX 2009 BT	VBB AR QSY 0400	(Remote tuner Taiwan)	JPL	SAT

6333	1208z (IP) 03 Jul	NR 2741/EX TIME 2012 BT	F2W8/P4R7 AR	(Remote tuner Taiwan)	JPL	SAT
7160	1220z (IP) 19 Jul	NR 1069/EX 2018 BT	A6W6/D3F4 AR	(Remote tuner Hong Kong)	JPL	MON
7621	1144z (IP) 19 Jul	NR 317/EX 1944 BT (Broke in the middle of a msg to	OSY0/9BDB/53JP AR send an Exercise msg and then re	(Remote tuner Hong Kong) esumed)	JPL	MON
7653	1201z (IP) 03 Jul	NR 1636/EX 2000 BT	H2N1/B4L5 AR	(Remote tuner Taiwan)	JPL	SAT
9123	1053z (IP) 15 Jul	RMKS 45.59.0 TO 454.969 BT NR 3202 CK 91 2107 1518 RM	W-0W-/- 0111	(Remote tuner Novosibirsk)	JPL	THU

	M89	6333kHz	1208 (IP) - 1209z	03 July 2021
--	-----	---------	-------------------	--------------

/EX TIME 2012 BT (IP - 1208z)F2W8/P4R7 AR

FFF NR 2741/EX TIME 2012 BT F2W8/P4R7 AR FFF NR 2741/EX TIME 2012 BT

F2W8/P4R7 AR QSY LW QSY LW QSY LW VVV (1209z)

M89 7653kHz 1201 (IP) - 1203z 03 July 2021

NR 1636/EX 2000 BT (IP - 1201z)H2N1/B4L5 AR NR 1636/EX 2000 BT (1202z)H2N1/B4L5 AR QSY 80 OSY 80 VVV (1203z)

M89 4531kHz 1208 (IP) - 12200z 12 July 2021

6V6N (IP - 1208z)

FFF NR 212 EEEE NR 2152/EX 2018 BT

TJK5/M4S7 AR NR 2152/EX 2018 BT TJK5/M4S7 AR NR 2152/EX 2018 BT

TJK5/M4S7 AR QSY 6 QSY 6 VVV (1220z)

Courtesy JPL

#### M89 9123kHz 1053 (IP) - 1102z 15 July 2021

RMKS 45.59.0 TO 454.969 BT (IP - Fading - 1053z)

S2GST/FGJ. AR K

R U 7G GA K (1054z) (Other stn N/H on this frequency) R GA K (1055z)

QSL ..00 K (1101z)

7G NR 3202 CK 91 2107 1518 RMKS 4546960 TO 45.6969 BT (Cont'd - 1102z) .U4 5T67 .7AD N4D3

M89 3967kHz 1204 (IP) - 1206z 19 July 2021

K6OG (IP - 1204z)

FF NR 1379/EX 2003 BT S7W3/N3U7 AR F NR 1379/EX 2003 BT S7W3/N3U7 AR

F NR 1379/EX 2003 BT S7W3/N3U7 AR QSY 03 QSY 03 VVV

(1206z)

Mgg 4125kHz 1458 (IP) -14 August 2021

VVV 8XB (x3) DE RGB (x2) F 253 253 253 (IP Cont'd - 1458z) (1502z) AS AS AS

VVV 8XB (x3) DE RGB (x2) F 253 (x3) (Cont'd - 1504z) QTC QTC NR NR 359 115 0814 2330 0109 BT

87341 66828 91291 79427 74936 23781 94572 16593 56758 79001

(Cont'd - 1507z)

Courtesy JPL

(1252z)

#### M95 O XSV, XSV70, XSV85

#### 8073kHz 1133 (IP) - 1140z 03 July 2021 M95

#### V BNGC (x3) DE XSV85 (x2)

In progress Chinese digital 4+4 QPSK 75/3000-LSB~1133z Switched to CW-Handsent~1137z

(1137z) V BNGC (x3) DE XSV85 (x2) HR 7G GA PSE CY (1138z)

NR 0478 CK 200 35 0703 1556 BT TT3 3U6 3AN 3U7 TAU 773 TA7 773 TAD 773 TAN 773 TUA 773 TUU 773 TU3 773 TU4 773

755 356 4TD (Cont'd - 1140z)

#### M95 4243//9054kHz 1140 - 1159z 12 July 2021

Into BOTH Chinese digital 4+4 QPSK 75/3000 - LSB AND Chinese voice - USB - Female 1140z Switched to Chinese digital 4+4 QPSK 75/3000 – LSB 1142z Switched to CW - Handsent 1151z

VV HR 7G TO YR PSE CY (1151z) NR 02 CK 39 49 0712 1500 BT

UA6 U46 N65 N45 D36 T4D DA5 335 D3U 7U3 N43 3TU 3D6 D7A 333 73U NA3 5T6 7DT 333 7AU 3N6 NN3 3NU 3D6 57T 333 7DU NA3 5T6 DDT 333 74U 3N6 NN3 T5A T4A 3AD N73 AR 7G AGN (1155z)

NR 02 CK 39 49 0712 1500 BT (Repeats message – 1155z)

AR A HR 7G GA

NR 24 CK 167 35 0712 1540 BT

UTU TAU 3U6 3A4 TTU 773 354 N35 374 4T7 (Cont'd – 1159z)

Courtesy JPL

### 5600kHz 1249 (IP) - 1255z 17 July 2021

WBPY DE XK9I QSA ? K (IP - 1249z)

R SGQ3 DE ZKNI QSA 3

R QSA 3 IEC BT 1235 AR K (1251z)

R RPT K

M95

R QSA 3 IEC BT 1234 AR K

R IEC BT 3464 AR K (1252z)R HR WK NR 232 K

R HR WK NR 232 K

R HR 7G GA K

R GA K R NR 315/CCK CK 141 24 0717 2100 RMKS 1184 TO 3390 K (1254z)

(Message format indicates M95 family)

R RPT TIME K

R RPT TIME 2100 K (1255z)

R GA K

R BT N46U DT7A 3546 UTD7 NA53 76DN TA4U 3546 7DAN TU53

T6D7 NAU5 (Cont'd - 1255z)

M95 10722kHz 1028 (IP) - 1030z 21 July 2021

V YHXD (x3) DE SAOC (x2)

RMKS 9673 TO 9967 BT

CL/1900/ZBT/9673/9967 AR AGN (IP - 1028z)

NR 1041830 RMKS 9673 TO 9967 BT

CL/1900/ZBT/9673/9967 AR QSL ? HR WK NR 240

(Return to Round Slip - 1030z)

JPLCourtesy

M95 Mo	orse Logs	(Bold type indicates 1	(Bold type indicates new logging)								
3642//NI	RH	Call Sign 3A7D	(Active d	aily - only first marker log has been included)							
3642//76	502	Call Sign 3A7D	(Active da	aily - only first marker log has been included)							
3968//NI	RH	•	eviously3 <i>I</i> 12 July	A7D) Suspect change in frequency and Round Slip for V YHXD (x3) DE SAQC (x2) (IP - Cont'd)		E 3A7D e tuner Novosibirsk)	JPL	MON			
3968//69	936	Call Sign SAQC (Pre	eviously3 <i>I</i> 03 Jul	A7D) Suspect change in frequency and Round Slip for V YHXD (x3) DE SAQC (x2) (IP - Cont'd)		E 3A7D e tuner Novosibirsk)	JPL	SAT			
		1637z	01 Aug	V YHXD (x3) DE SAQC (x2) (IP - Cont'd)	(Remote	e tuner Novosibirsk)	JPL	SUN			
4243//NI	RH	1145 (IP) – 1151z	ers from cu 10 Aug 13 Aug	NR 20 CK 138 35 0810 1548 BT NR 005 CK 32 35 0813 1545 BT NR 069 CK 17 35 0813 1618 BT NR 26 CK 117 35 0813 1720 BT		e tuner Taiwan) e tuner Taiwan)	JPL JPL	TUE FRI			
4243//90	054		ers from cu 03 Jul	nrent XSV70 and XSV85 message numbers. NR CK 203 35 07 03 1551 BT	(Remote	e tuner Taiwan)	JPL	SAT			
		,	12 Jul	Into BOTH Chinese digital 4+4 QPSK 75/3000 - LSB USB - Female - Chinese– 1034z - Only voice – 1035z	- Silent -	1052z	JPL	MON			
		(This sked normally	starts at 1	1140z - Special Sked?) (As it stands, this is a Q26 sked	l followed	l by a V26 sked)					
		1140 (IP) - 1159z	12 Jul	NR 02 CK 39 49 0712 1500 BT NR 24 CK 167 35 0712 1540 BT	(Remote	e tuner Taiwan)	JPL	MON			
		` '	12 Jul 17 Jul	NR 040 CK 70 35 0712 1801 BT NR 34 CK 076 35 0717 1555 BT NR 081 CK 22 35 0717 1614 BT	*	e tuner Taiwan) e tuner Taiwan)	JPL JPL	MON SAT			
4364//80	73	Call Sign XSV85		NK 081 CK 22 33 0717 1014 B1							
			12 Jul 17 Jul	NR 0515 CK 220 35 0712 1544 BT NR 0526 CK 36 35 0717 1656 BT NR 0527 CK 283 35 0717 1701 BT	,	e tuner Taiwan) e tuner Taiwan)	JPL JPL	MON SAT			
		1131 - 1144z	03 Aug 10 Aug 13 Aug	NR 0623 CK 406 35 0803 1626 BT NR 0665 CK 163 35 0810 1550 BT NR 0671 CK 131 35 0813 1550 BT	(Remote	e tuner Taiwan) e tuner Taiwan) e tuner Taiwan)	JPL JPL JPL	TUE TUE FRI			
4679	LKM5	Call Sign LKM5 wor 1112z	rking RG2 29 Aug	G (QSO & MsG) NR 324/CCK 95 40 08 29 1918 RMKS 4145 TO 4233 MSG 324/CCK CK 95 40 08 29 1928 RMKS 4233 TO		(SDR Japan) (SDR Japan)	F5JBR F5JBR	SUN SUN			
4793	Q8AI	Call Sign Q8AI work 1139z	king 9QA7 29 Aug	T (QSO & MSG) NR 070/CCK CK 31 80 08 29 1935 RMKS 9581 TO 9 NR 070/CCK CK 30 80 08 29 1935 RMKS 9121 TO 9		(SDR Japan) (SDR Japan)	F5JBR	SUN			
4993	Р5НА	Call Sign P5HA worl	king D.4Q 29 Aug	(QSO and MSG) NR 071/CCK CK31 8 0829 1955 RMKS 8376 TO 482	2 =	(SDR Japan)	F5JBR	SUN			
5479//10	722	1126z	(Active da 03 Jul 21 Jul	aily - only first marker log has been included) V YHXD (x3) DE SAQC (x2) (IP - Cont'd) V YHXD (x3) DE SAQC (x2) (IP - Cont'd) RMKS 9673 TO 9967 BT CL/1900/ZBT/9673/9967 AR AGN NR 1041830 RMKS 9673 TO 9967 BT	•	e tuner Novosibirsk) e tuner Novosibirsk)	JPL JPL	SAT WED			
		1341z	27 Aug	V YHXD (x3) DE SAQC (x2) (IP - Cont'd)	(Remote	e tuner Novosibirsk)]	JPL	FRI			
5600	XK91/Z		<b>format in</b> e 17 Jul	dicates M95 family) WBPY DE XK9I QSA ? SGQ3 DE ZKNI QSA 3 QSA 3 IEC BT 1235 AR K IEC BT 3464 AR K NR 315/CCK CK 141 24 0717 2100 RMKS 1184 TO	Ì	e tuner Taiwan)	JPL	SAT			
6936	SAQC	Call Sign SAQC 1257z	29 Aug	YHXD de SAQC V	(SDR Ja	apan)	F5JBR	SUN			
8073		Call sign XSV85 Usual format is Initial	call-up in	voice USB, then to digital 4+4 mode LSB, finally, swite	ching to C	W					
		1133 – 1140z	03 Jul	NR 0478 CK 200 35 0703 1556 BT	(Remote	e tuner Taiwan)	JPL	SAT			

1143 - 1155z 22 Jul NR 0563 CK 35 35 0722 1529 BT (Remote tuner Hong Kong) JPL FRI

NR 0564 CK 44 35 0722 1530 BT NR 0565 CKK 353 35 0722 1627 BT

Note: Normally, only one message is sent. Occasionally, a second message is sent. It's extremely rare for 3 messages to be sent

9054 Call sign XSV85 All logged via Remote tuner Hong Kong unless stated

(See also 4243//9054kHz listing)

1158 (IP) - 1208z 22 Jul NR 44 CK 112 35 0722 1518 BT (Remote tuner Hong Kong) JPL FRI

NR 096 CK 17 35 0722 1607 BT

1151 (IP) - 1156z 03 Aug NR 039 CK 15 35 0803 1550 BT (Remote tuner Taiwan) JPL TUE

NR 039 CK 15 35 0803 1550 BT NR 06 CK 114 35 0803 1602 BT

10180 Call Sign 3A7D (Active daily - only first marker log has been included)

10722//NRH Call Sign 3A7D

1115z 10 Aug V YHXD (x3) DE SAQC (x2) (Remote tuner Novosibirsk) JPL TUE

## Marker Beacons (MX MXI)

Firstly, an item of historic interest;

#### "...A long time mystery regarding the Soviet 'U' channel markers.

The 'U' marker disappeared from the airwaves in the spring of 1990. I have recorded an occasion when the 'U' marker ran on 13 frequencies simultaneously! My colleague, A. Stellingis confirmed that these channels were continuously monitored at the jamming correction and control posts.

The 'U' channels were used to transmit orders to the jammers - most likely to issue jamming frequency time and schedules. It must have been that 'U' channels were used as backup instead of the teletype link to Moscow. (It is also believable that the 'U' marker on the shortwave bands was used for civil defence and other purposes).

It is worthwhile to note that when the USSR ceased its jamming on 30 November 1988, the 'U' markers transmitters continued to operate for another 18 months! This would indicate that throughout most of the USSR jamming system continued to be kept ready to start again."

3635.5	7422.5	9056.5	10230.5
4774.5	7676.5	9243.5	12186.5
6244.5	8135.5	9313.5	
6862.5	8630.5	10133.5	
6984.5	8641.5	10214.5	

Table of Frequencies in use by the Soviet 'U' Marker Transmitters

(The above is an extract from 'Jamming' by Rimantas Pleikys, former Minister for Communications & Informatics, Vilnius, Lithuania)

#### Current Beacon Logs:

5153.7 5153.8 5153.9 5154.1	0041z 0139z 2127z 0042z	17 Jul 23 Jul 07 Aug 17 Jul	MXI CW Beacon "D" MXI CW Beacon "P" MXI CW Beacon "S" MXI CW Beacon "A"	Kaliningrad Severomorsk			BR BR BR AB	SAT FRI SAT SAT
5156.8	0043z	17 Jul	MX CW Beacon "L'	St Petersburg			BR	SAT
7508.7 7508.8 7509.1	0143z 1401z 0144z	23 Jul 17 Jul 23 Jul	MXI CW Beacon "D" MXI CW Beacon "P" MXI CW Beacon "A				BR BR BR	FRI SAT FRI
7222.5	0543z 0521z 1139z 1018z	22 Jul 23 Jul 27 Jul 28 Jul	MXV CW Beacon "V MXV CW Beacon "V MXV CW Beacon "V MXV CW Beacon "V	" "	SDR Novosibirsk SDR Novosibirsk SDR Novosibirsk SDR Novosibirsk	Strong Strong Strong Strong	E.SMITH E.SMITH E.SMITH E.SMITH	THU FRI TUE WED
8494.8 8494.9 8495.1	1404z 0047z 0047z	17 Jul 17 Jul 17 Jul	MXI CW Beacon "P MXI CW Beacon "S MXI CW Beacon "A"	" Severomorsk			BR BR BR	SAT SAT SAT
8497.8	1349z	17 Jul	MX CW Beacon "L"	St Petersburg			BR	SAT
10871.7 10871.8 10871.9 10872.1	1406z 0049z 0050z 0049z	17 Jul 17 Jul 17 Jul 17 Jul	MXI CW Beacon "D" MXI CW Beacon "P" MXI CW Beacon "S" MXI CW Beacon "A"	Kaliningrad Severomorsk			BR BR BR BR	SAT SAT SAT SAT
13527.9 13528	1039z 1039z	23 Jul 23 Jul	MXI CW Beacon "S" MXI CW Beacon "C"	Severomorsk Moscow			BR BR	FRI FRI

20048.1	1035z	23 Jul	MX CW	MX CW Beacon "A" Astrakhan				BR	FRI
Oddi	<u>ties</u>								
3510kHz 3510	'The Air Horn' 0052z	17 Jul. 21	Pulsing M	larker (Air Horn)			Strong	BR	SAT
<b>4310kHz</b> 4310	- The Goose' 0500z	14 Jul	Normal so	ound from the Goose, with minor QSB	US	SB	Moderate	chpa	Wed
<u>\$28</u> 4625 4625	<u>'The Buzzer'</u> 0503z 0054z	14 Jul 17 Jul	S28 S28	Slightly abnormal signal from the But 'The Buzzer' Marker USI		Veak		. I	Wed SAT
<b>S30</b> 3756	<u>'The Pip'</u> 0058z	17 Jul	S30	'Pip' marker (Night freq) USI	В			BR	SAT
<u>S32</u>	'Squeaky Wheel'								
3828	0037z	17 Jul	S32	'Squeaky Wheel' marker (Night freq)	)		USB	BR	SAT
<u>Contribu</u>	tors: AB, BR	, chpa, ER,	E.SMITH,	F5JBR, Gert, HFD, JPL, RNGB, XAH	H Th	hank you	all for you	r logs.	

BR

SAT

MXI CW Beacon "S" Severomorsk

#### Of carriers PoSW writes:

16331.9 1408z

17 Jul

There has been mention in the Newsletter from time to time of plain carriers and a couple of examples were noticed in late August which appeared to be connected with the STANAG 4285 noise-maker operation:-

22-Aug-21, Sunday:- 1356 UTC, 6414 kHz, very strong signal, not just a plain carrier but modulated by audio tone, steady enough to give a reading on a frequency counter coupled to the low-level audio output on the receiver, displayed 605 – 606 Hz. Was on when checked throughout the day and on the following day, Monday the 23<sup>rd</sup>, and still there on Tuesday the 24<sup>th</sup> at 0730 UTC. However, was gone when monitored at around 1500 UTC when there was a strong "XJT" on this frequency, or very close to it.

The second example: 26-Aug-21, Thursday: 1817 UTC, 6786 kHz, very strong carrier, unmodulated, still on when checked at 1905, 2015 and 2120 UTC; was not there at 0825 UTC on the 27th but there was an S9+ "XJT" churning away.

Also, what sounded like an XJT showed up inside the 40 metre amateur band for a short while in early August:-

2-Aug-21, Monday:- 1513 kHz, 7103 kHz, very strong "XJT" on this frequency, still on at 1910 UTC. No sign at 0615 on the following day or at 0945 UTC but was heard at 1216, weaker than previously, not there at 1825 UTC and not heard since.

## Voice stations, Polytones and Hybrids

# **E06**

# July/Aug log:

First /Third Thursday (repeats Friday)

Monday 30/08	'537' 620 41 10471etc	0210z (thanks HfD)	11472kHz	0310z	13573kHz
Thursday 22/07	y (repeats Friday) '361' 507 48 04980etc	0300z (thanks HfD)	14845kHz	0400z	12189khz

0500z

01/07 '679' 832 54 57902 21534 23283 36029 75066 48290 37025 81007 63625 21014 08400 67197 93780 31028 70560 18054 46273 74290 39607 70590 63764 27075 86719 04817 41774 19399 99071 17017 38856 04648 21690 97824 10695 48825 97461 01018 97825 87873 47480 13964 21641 26494 58901 65678 68400 76912 72510 33406 65904 61017 87184 33679 82538 24323 832 54 00000

0600z

15/07 '679' 243 50 89280 86572 47510 43851 05131 40967 50174 85532 29849 18665 71984 75133 50437 33653 52761 36253 82334 25308 75315 87500 16408 12109 27715 22612 63310 32154 99643 60984 49882 43937 80029 04552 47295 85812 48124 61951 35623 17594 75231 25908 34520 92710 79266 14782 54710 34382 99334 14213 49953 14216 243 50 00000

0500z13540kHz 0600z 16115kHz

05/08 1210, 496 53 41649 54422 87782 05294 87700 04989 98703 33080 06046 61782 47370 96673 09217 23087 78294 59150 90083 15819 13931 47114 28314 46599 03766 64901 05143 94325 80925 46385 06119 42680 18496 05309 16538 76029 02734 70095 39234 87129 65357 14067

 $89420\ 70085\ 42115\ 17007\ 46271\ 97012\ 49800\ 19017\ 65926\ 01815\ 98920\ 41526\ 78425\ 496\ 53\ 00000$ 

19/08  $\cdot 210^{\circ} \, 768 \, 53 \, 83527 \, 67343 \, 91699 \, 04726 \, 75410 \, 28317 \, 73803 \, 48579 \, 97213 \, 29203 \, 33575 \, 04132 \, 58340 \, 51171 \, 22644 \, 33405 \, 63311 \, 63871 \, 99483 \, 54915 \, 73803$  $10441\ 62557\ 33802\ 59361\ 39045\ 47894\ 24307\ 92216\ 11129\ 78123\ 78291\ 45393\ 38479\ 48278\ 26474\ 25183\ 91101\ 76145\ 71520\ 88650$ 

 $47951\ 99639\ 93709\ 65676\ 75880\ 15302\ 62153\ 08826\ 47749\ 12599\ 25025\ 38238\ 35628\ 768\ 53\ 00000$ 

#### Regarding E06 Peter makes the following observations:

Not much to report on the E06 English Man, was active on many schedules not so long ago. The following appears by courtesy of the prediction

First + Third Thursdays in the Month 0500 + 0600 UTC Schedule:-15-July-21:-0500 UTC, 13825 kHz, calling "679", DK/GC "243 243 50 50", weak signal.

0600 UTC, 15615 kHz, second sending, also weak.

16-July-21, Friday:- 0500 UTC, 13825 kHz, the expected repeat on the following day, weak.

0600 UTC, 15615 kHz, weak.

5-Aug-21:- 0500 UTC, 13540 kHz, good signal, call "210", DK/GC "496 496 53 53", ended after 0513 UTC.

0600 UTC, 16115 kHz, second sending, also a good signal, slight interference from a rapidly swept carrier.

6-Aug-21, Friday:- 0500 UTC, 13540 kHz, first sending of the "next day repeat", much weaker than 24 hours earlier.

0600 UTC, 16115 kHz, very weak, way down in the noise.

19-Aug-21:- Clean forgot that this was the third Thursday in this month and missed the 0500z sending and nothing heard at 0600z on 16115.

20-Aug-21, Friday:- Nothing heard at 0500 on 13450, very weak signal of some kind but unable to confirm as E06. Nothing heard at 0600 UTC on 16115.

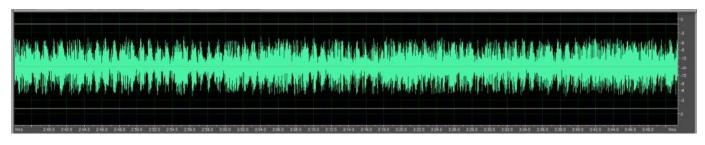
#### Sunday/Wednesday

#### July 2021

1700z	12223kHz	1720z	11023kHz	1740z	10123kHz			
04/07	201 1	595 87 38875	etc				H-FD	SUN
07/07	201 0	000		1700Strong [M8 QTH] Weak [PldnQTH]				
11/07	201 0	000				1700z Ve	ery strong, 1720z Fair	
14/07	201 1	5790 66 78733	3 44330 000 000				Fair	
18/07	201 1	5790 66 78733	3 44330 000 000			[1720z Fair]	Strong	
21/07	201 0	000					Weak	
25/07	201 0	000					1700z Strong, 1720z	Fair
28/07	201 1	665 71 08659	30948 000 000			[1720z Very weak]	Fair QRM2	

#### August 2021

1700z	13397kHz	1720z	12197kHz	1740z	10697kHz			
01/08	316 1	665 71 08659	30948 000 000			[1700z Fair]	Weak	
04/08	316 00	00					Strong	
08/08	316 00	00					Fair	



13397kHz1700z

11/08/2021

Sample of message text – slight noise on signal

11/08 316 1 1839 66 61472 ... 10268 000 000

[1700z Strong]

Weak

22/08

15/08 316 1 1839 66 61472 ... 10268 000 000

Weak

18/08 316 1 1839 66 61472 ... 10268 000 000

Strong

316 1 1839 66 61472 ... 10268 000 000

[1740z Weak QRM4\*] Strong [See image below, Courtesy XAH; 1700z Very strong]

\*Strong 2859Hz tone; when notched E07 audible

Groups recorded by XAH [pen ran out]!

25/08 316 000 [1720z QRM2] Strong

29/08 316 000 [M8 QTH: Fair S6, PLdn Strong S9] Strong

Sunday/Saturday

July 2020

0600z	10317kHz	0620z	11117kHz	0640z	12217kHz	
18/07	312 000					Fair
25/07	312 000					Weak

### Tuesday/Friday

### July 2021

0700z	15962kHz	0720z	17462kHz	0740z	18542kHz		
02/07	945 000					V	Weak
06/07	945 1 469	9 125 8699	5 54187 000 000		0720z DutchSDR, 0740z Un	workable] \	Weak
09/07	945 1 469	9 125 8699:	5 54187 000 000			1	Weak Dutch SDR
13/07	945 1 469	9 125 8699:	5 54187 000 000		[0740z Dutch SDR]	1	Weak
16/07	945 1 469	9 125 8699:	5 54187 000 000		[0700z QTH Rx]	1	Weak Dutch SDR
20/07	945 000					V	Weak
23/07	945 000					1	Weak
27/07	945 000					1	Weak
30/07	945 000				[0720z Dutch SDR]	1	Weak
August 2	2021						
0700z	16246kHz	0720z	18446kHz	0740z	19246kHz		
03/08	242 1 115	54 59 1777	2 21055 000 000		[0700z Weak, QTH Rx]	V	Weak Dutch SDR
06/08	242 1 115	54 59 1777	2 21055 000 000		[0700z QTH Rx]	V	Weak, Dutch SDR
10/08	242 000				[0720z Dutch SDR]	1	Weak
13/08	242 000				[0720z Dutch SDR]	1	Weak
17/08	242 1 166	50 59 0653	8 23001 000 000		[1700z QRM5]	1	Weak Dutch SDR
24/08	242 000				[0700z QRM]	1	Weak, Dutch SDR
27/08	242 000				[0720z Dutch SDR]	1	Weak
31/08	242 1 814	44 59 32820	0 92292 000 000		[0720/0740z NRH]	1	Weak, Dutch SDR
Thursda	y/Saturday						
July 202	1						
1410z	13562kHz	1430z	14862kHz	1450z	16162kHz		
01/07	441 000					H-FD	THU
08/07	441 1 554	49 63 4173	5 01456 000 000				Weak
10/07	441 1 554	49 63 4173	5 01456 000 000		[1410z	z Home QTH] V	Weak Dutch SDR
15/07	441 000						Weak
17/07	441 000					1410z F	air 1430z Strong
22/07	441 000						Weak
29/07	441 000						Weak
31/07	441 000						Weak
August 2	2021						
1410z	13519kHz	1430z	14819kHz	1450z	15919kHz		
05/08	288 1 655	5 56 87095	61847 000 000				Weak
07/08	288 1 655	5 56 87095	61847 000 000				Weak
12/08	288 000						Weak
26/08	288 000				[1410z	z QRM]	Weak
28/08	288 000						Weak

#### July 2021

#### Saturday

1300z	12176kHz	1320z	11576kHz	1340z	10276kHz		
10/07	152 000						Fair
17/07	152 000						Fair
31/07	152 000						Weak
August 2	2021						
07/08	152 000					1300z Strong, 1320	z Fair
14/08	152 000					1300z Fair, 1320z (	QRM5 NRH
21/08	152 000						Fair
28/08	152 000					[Strong with XAH]	Weak

#### PoSW's E07 logs reflect that above:

<u>Sunday + Wednesday Schedule, 1700 UTC Start:-</u> 4-July-21, Sunday:- 1700 UTC, 12223 kHz, "201 201 1" for a full message. DK/GC "595 87" x 2, strong signal, ended after 1711 UTC.

1720 UTC, 11023kHz, weaker, around a "6" on the S-meter.

1740 UTC, 10123 kHz, also S6.

7-July-21, Wednesday:- 1700 UTC, 12223 kHz, "201 201 201 000", strong.

1720 UTC, 11023 kHz, weaker.

11-July-21, Sunday:- 1700 UTC, 12223 kHz, "201 201 201 000", S9.

1720 UTC, 11023 kHz, S5 to S6.

18-July-21, Sunday:- 1700 UTC, 12223 kHz, "201 201 201 1", full message, DK/GC "5790 66" x 2, strong, well over S9.

1720 UTC, 11023 kHz, S7.

1740 UTC, 10123 kHz, also S7.

21-July-21, Wednesday:- 1700 UTC, 12223 kHz, "201 201 201 000", S8.

1720 UTC, 11023 kHz, S4 to S5.

25-July-21, Sunday:- 1700 UTC, 12223 kHz, "201 201 201 000", over S9.

1720 UTC, 11023 kHz, S6 to S7.

28-July-21, Wednesday:- 1700 UTC, 12223 kHz, full message again, "201 201 201 1", DK/GC "665 71" x 2, strong signal, peaking over S9.

1720 UTC, 11023 kHz, weaker, S6 to S7.

1740 UTC, 10123 kHz, back up to S9

1-Aug-21, Sunday:- 1700 UTC, 13397 kHz, "316 316 316 1" for a "full message", DK/GC

"665 71" x 2. Strong S9 signal.

1720 UTC, 12197 kHz, S7 to S8.

1740 UTC, 10697 kHz, the weakest sending of the three, S5.

8-Aug-21, Sunday:- 1700 UTC, 13397 kHz, "316 316 316 000", peaking over S9.

1720 UTC, 12197 kHz, also over S9.

11-Aug-21, Wednesday:- 1700 UTC, 13397 kHz, "316 316 316 1" for a full message, DK/GC "1839 66" x 2, good signal.

1720 UTC, 12197 kHz, strong, over S9.

1740 UTC, 10697 kHz, much weaker.

15-Aug-21, Sunday:- 1700 UTC, 13397 kHz "316" and "1839 66" again, S7 to S8.

1720 UTC, 12107 kHz, S9. 1740 UTC, 10697 kHz, weak.

18-Aug-21, Wednesday:- 1700 UTC, 13397 kHz, still "1839 66", strong signal.

1720 UTC, 12197 kHz. Strong.

1740 UTC, 10697 kHz, much weaker.

22-Aug-21, Sunday:- 1700 UTC, 13397 kHz, "1839 66" yet again, the message can't have got through. Strong signal.

1720 UTC, 12197 kHz, strong, peaking well over S9.

1740 UTC, weak, only just readable.

25-Aug-21, Wednesday:- 1700 UTC, 13397 kHz, "316 316 316 000", back in the old routine,

strong signal.

1720 UTC, 12197 kHz, also strong.

#### Saturday Schedule, 1300 UTC Start:-

3-July-21:- 1300 UTC, 12176 kHz, "152 152 152 000", S8 signal.

1320 UTC, 11576 kHz, also S8.

10-July-21:- 1300 UTC, 12176 kHz, S9 and 1320 UTC, 11576 kHz, slightly weaker, "152 152 152 000".

24-July-21:- 1300 UTC, 12176 kHz, "152 152 152 000", S8 with QSB.

1320 UTC, 11576 kHz, S6.

31-July-21:- 1300 UTC, 12176 kHz, "152 152 152 000", S8 to S9.

1320 UTC, 11576 kHz, S7 with deep QSB.

7-Aug-21:- 1300 UTC, 12176 kHz, "152 152 152 000", S9.

Missed 1320z sending.

14-Aug-21:- 1300 UTC, 12176 kHz, peaking S9 and 1320 UTC, 11576 kHz, weaker, "152 152 000".

21-Aug-21:- 1300 UTC, 12176 kHz, S9, "152 152 152 000".

1320 UTC, 11576 kHz, S7.

#### Sunday Schedule, 0600 UTC Start:-

4-July-21:- 0600 UTC, 10317 kHz, "312 312 312 000", weak signal.

0620 UTC, 11117 kHz, stronger.

11-July-21:- 0600 UTC, 10317 kHz, S5 to S6 and 0620 UTC, 11117 kHz, S8, "312 312 312 000".

18-July-21:- 0600 UTC, 10317 kHz, "312 312 312 000", S7.

0620 UTC, 11117 kHz, also S7.

1-Aug-21:- 0600 UTC, 9261 kHz, "224 224 224 000", S7.

0620 UTC, 10261 kHz, weaker.

8-Aug-21:- 0600 UTC, 9261 kHz and 0620 UTC, 10261 kHz, both strong, "224 224 224 000".

15-Aug-21:- 0600 UTC, 9261 kHz, "224 224 224 000", strong signal.

0620 UTC, 10261 kHz, also strong.

## **E07a**

The three E07a schedules which are best received in the UK were all in "no message" mode throughout May and June but the Wednesday evening 2000z start appeared with a message on the very last day of June. Full message from the Friday and Saturday schedules at the start of July but nothing to get excited about for the rest of that month and in August. [PoSW]

#### Wednesday Schedule, 2000 UTC Start:-

30-June-21:- 2004 UTC, 12166 kHz, in progress with a "full message", surprisingly, expected it to be "000" as has been the case for the past several weeks in which case it would have ended shortly after 2002z. Very strong signal, ended just before 2006.

2020 UTC, 10766 kHz, second sending, "172 172 172 1 60704", DK/GC "653 38" x 2. Very strong.

2040 UTC, 9266 kHz, third sending, also very strong.

7-July-21:- 2000 UTC, 12166 kHz, "172 172 172 000", back in the old routine, very strong.

2020 UTC, 10766 kHz, also very strong.

14-July-21:- 2000 UTC, 12166 kHz and 2020 UTC, 10766 kHz, slightly weaker, "172 172 172 000".

21-July-21:- 2000 UTC, 12166 kHz, "172 172 172 000", strong but not the usual S9+.

2020 UTC, 10766 kHz, stronger.

28-July-21:- 2000UTC, 12166 kHz and 2020 UTC, 10766 kHz, both very strong, "172 172 172 000".

4-Aug-21:- 2000 UTC, 12166 kHz, "172 172 172 000", very strong signal.

2020 UTC, 10766 kHz, also very strong.

11-Aug-21:- 2000 UTC, 12166 kHz, "172 172 172 000", strong but not the usual rock-crusher of a signal.

2020 UTC, 10766 kHz, stronger, S9+.

18-Aug-21:- 2000 UTC, 12166 kHz and 2020 UTC, 10766 kHz, both very strong, "172 172 172 000".

25-Aug-21:- 2000 UTC, 12166 kHz, "172 172 172 000", very strong.

2020 UTC, 10766 kHz, also very strong.

#### Friday Schedule, 1510 UTC Start:-

2-July-21:-1510 UTC, 12213 kHz, "241 241 1 67673", "full message", DK/GC "7466 54" x 2, good signal, S8.

1530 UTC, 11413 kHz, S5 to S6.

1550 UTC, 10113 kHz, weak.

9-July-21:- 1510 UTC, 12213 kHz, "241 241 241 000", S7.

1530 UTC, 11413 kHz, peaking S7 with QSB.

16-July-21:- 1510 UTC, 12213 kHz, S8 to S9 and 1530 UTC, 11413 kHz, weaker, "241 241 241 000".

23-July-21:- 1510 UTC, 12213 kHz, "241 241 241 000", S8.

1530 UTC, 11413 kHz, S6 to S7.

30-July-21:- 1510 UTC, 12213 kHz, "241 241 241 000", interference from very strong buzz/pulse type signal extending from approx 12190 to 12220 kHz.

1530 UTC, 11413 kHz, S7 to S8.

6-Aug-21:- 1510 UTC, 12213 kHz, S8 and 1530 UTC, 11413 kHz, S6 to S7, "241 241 241 000".

13-Aug-21:- 1510 UTC, 12213 kHz, "241 241 241 000", S7 to S8.

1530 UTC, 11413 kHz, weaker.

20-Aug-21:- 1510 UTC, 12213 kHz, S7 to S8 and 1530 UTC, 11413 kHz, weaker, "241 241 241 000".

27-Aug-21:- 1510 UTC, 12213 kHz, "241 241 241 000", S7.

1530 UTC, 11413 kHz, weak, difficult copy.

#### Saturday Schedule, 0800 UTC Start:-

3-July-21:- 0800 UTC, 12173 kHz, "198 198 198 1 67373", DK/GC "7466 54" x 2, as expected a repeat of the message heard on yesterday's 1510z schedule. Weak signal at first, became stronger.

0820 UTC, 13973 kHz, S5 to S6.

0840 UTC, 14873 kHz, interference from one of those wide-band buzz/pulse signals, someone's over-the-horizon radar, perhaps.

10-July-21:- 0800 UTC, 12173 kHz and 0820 UTC, 13973 kHz, both around S7, "198 198 198 000".

17-July-21:- 0800 UTC, 12173 kHz, "198 198 198 000", S7 to S8.

0820 UTC, 13973 kHz, weaker.

31-July-21:- 0800 UTC, 12173 kHz, S7 to S8 and 0820 UTC, 13973 kHz, S4 to S5, "198 198 198 000".

14-Aug-21:- 0800 UTC, 12177 kHz, "148 148 148 000", S6 to S7.

0820 UTC, 13477 kHz, weaker, interference from a rapidly swept carrier.

21-Aug-21:- 0800 UTC, 12177 kHz, strong signal, "148 148 148 000".

0820 UTC, 13477 kHz, weaker and with sweeping carrier interference.

912 000

#### Others' Logs

#### Wednesday

#### July 2021

2000z	12166kHz	2020z	10766kHz	2040z	9266kHz		
07/07	172 000						Very strong
14/07	172 000					[2020z Weak]	Very strong
21/07	172 000						Very strong
28/07	172 000						Very strong
August 2	2021						
04/08	172 000						Very strong
11/08	172 000						Very strong
18/08	172 000						Very strong
25/08	172 000						Very strong

#### Thursday

#### July 2021 0.420

29/07

0430z	7933kHz	0450z	9133kHz	0510z	10233kHz	
01/07	912 1 60	704 653 38	81496 55549 000 00	00		Very strong
65929 28084 11885 98705 42767 52974 54342 71834 19869 55508	9 31802 48953 37376 4 13794 59019 79903 5 66320 90427 65676 4 08569 24225 49188 4 36680 52192 32119 8 74086 61058 90912 3 49539 39471 46490					
08/07	912 000					Strong QRM2
15/07	912 000					Very strong
22/07	912 000					Strong

Fair

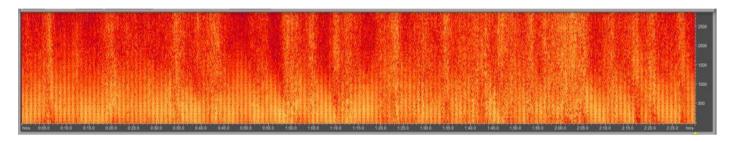
### August 2021

05/08	912 000	[0450z QRM2]	Very strong
12/08	912 000	[0450z Weak]	Strong
19/08	912 000		Very weak; poor condx
26/08	912 000		Very strong

### Friday

### July 2021

1510z	12213kHz	1530z	11413kHz	1550z	10113kHz		
02/07	241 1	67673 7466 5	4 06687 46660 0	00 000		[0800z Very weak QRM3]	Weak QRM3
09/07	241 00	00					Weak
16/07	241 00	00					1510z Strong, 1530z weak
23/07	241 00	00					Weak
30/07	241 00	00				1510z Strong QRM*, 15	30z Weak



QRM on 12213kHz 1510z  $\,$  30/07 as heard by M8 and others

### August 2021

1510z	12213kHz	1530z	11413kHz	1550z	10113kHz		
06/08	241 000						Fair
13/08	241 000						Weak
20/08	241 000					[1530z only]	Weak

### Saturday

July 202	1						
0800z	12173kHz	0820z	13973kHz	0840z	14873kHz		
03/07	198 1 676	673 7466 54	4 06687 46660 00	000 000		[0820z Weak]	Very weak
10/07	198 000						Fair
17/07	198 000						Weak
31/07	198 000						Fair
August 2	2021						
0800z	12177kHz	0820z	13477kHz	0840z	14877kHz		
07/08	148 000						0800z Strong, 0820z Weak
20/08	148 000						Weak

# E11 & E11a log July/August

4783kHz	1910z	07/07 [395/38 3652525321] Out 1921z S9	Malc	WED
1705KHZ	1910z	10/07 [395/38 36525etc] Repeat of Wednesday	Malc	SAT
	1910z	14/07 [395/00] Out 1913z S9	Malc	WED
	1910z	17/07 [396/00] Out 1913z S9	Malc	SAT
	1910z	21/07 [391/00] Out 1913z S9	Malc	WED
	1910z	24/07 [399/00] Out 1913z S9	Malc	SAT
	1910z	28/07 [394/00] Out 1913z S9+QRM	Malc	WED
	1910z	31/07 [399/00] Out 1913z S9	Malc	SAT
	1910z	04/08 [391/00] Out 1913z S9	Malc, dMHz	WED
	1910z	07/08 [390/00] Out 1913z S9+10 +QRM	Malc, Kopf	SAT
	1910z	11/08 [396/00] Out 1913z S9	Malc Malc	WED
	1910z	18/08 [393/00] Out 1913z S7+QRM	Male, RNGB	WED
	1910z	25/08 [399/38 4202303035] Out 1916z S9	Malc	WED
	1910z	28/08 [399/38 42023etc] Repeat of Wednesday	Malc	SAT
4909kHz	0820z	02/07 [439/34 05037 172193 77178 71250 90610 61734 16536 8104820948 49471] Out 0830z	RNGB, Malc	FRI
	0820z	08/07 [438/00] Out 0823z S2	Malc	THU
	0820z	09/07 [439/00] Out 0823z S2	Malc, RNGB	FRI
	0820z	15/07 [435/00]	RNGB	THU
	0820z	22/07 [438/00] Out 0823z S3 (Dutch SDR)	Malc	THU
	0820z	23/07 [438/00] Out 0823z S2 (Dutch SDR)	Malc, RNGB	FRI
	0820z		Malc	FRI
		30/07 [439/00] Out 0823z S2 (Dutch SDR)		
	0820z	06/08 [435/00] Out 0823z S2	Malc	FRI
	0820z	12/08 [431/00] Out 0823z S2	Malc	THU
	0820z	13/08 [439/00] Out 0823z S2 (Dutch SDR)	Malc, XAH	FRI
	0820z	20/08 [436/00]	RNGB	FRI
	0820z	26/08 [431/37 51656 18570 16554 31195 19836 75856 67750 7364644148 24587] Out 0831z	RNGB. Malc	WED
	0820z	27/07 [431/37 51656etc] Repeat of Wednesday	Malc	FRI
	00202	21101 [151151 51050eta] repeat of Wealtestay	17Taic	1101
5082khz	1530z	10/07 [368/00] Out 1533z S2	Malc	SAT
3002KHZ	1530z	11/07 [368/00] Out 1533z S2	Malc	SUN
	1530z	17/07 [368/33 0720823565] Out 1540z S5 (Dutch SDR)	Malc	SAT
	1530z	18/07 [368/33] Out 1533z S2	Malc	SUN
	1530z	24/07 [360/00] Out 1533z S3	Malc	SAT
	1530z	25/07 [363/00] Out 1533z S3	Malc	SUN
	1530z	31/07 [369/00] Out 1533z S2	Malc	SAT
	1530z	07/08 [366/00] Out 1533z S2	Malc	SAT
	1530z		Malc	SUN
		08/08 [360/00] Out 1533z S3		
	1530z	15/08 [360/00] Out 1533z S2	Malc	SUN
	1530z	28/08 [363/00] Out 1533z S2	Malc	SAT
	1530z	29/08 [365/00] Out 1533z S5 (Dutch SDR)	Malc, Xaver	SUN
5371khz	1605z	06/07 [237/00] Out 1608z S3	Malc	TUE
	1605z	11/07 [235/00] Out 1608z S3 (Dutch SDR)	Malc	SUN
	1605z	13/07 [237/33 3236580920] Out 1615z S2	Malc	TUE
	1605z	18/07 [237/33 32365etc] Repeat of Tuesday	Malc	SUN
	1605z	20/07 [237/00] Out 1608z S2	Malc	TUE
	1605z			TUE
		27/07 [237/00] Out 1608z S2	Malc	
	1605z	01/08 [230/00] Out 1608z S3	Malc	SUN
	1605z	03/08 [236/00] Out 1608z S2	Malc	TUE
	1605z	08/08 [236/00] Out 1608z S3	Malc	SUN
	1605z	10/08 [236/39 6269542506] Out 1616z S2	Malc	TUE
	1605z	15/08 [236/39 62695etc] Repeat of Tuesday	Malc	SUN
	1605z	17/08 [238/00] Out 1608z S3	Malc	TUE
	1605z	22/08 [231/00]	XAH	SUN
	1605z	24/08 [236/00] Out 1608z S5 (Dutch SDR)	Malc	TUE
	1605z	29/08 [230/00] Out 1608z S5 (Dutch SDR)	Malc, Xaver	SUN
	1605z	31/08 [231/00] Out 1608z S2	Malc, Gary H	TUE
5409kHz		01/08 [522/00]	dMHz	SUN
	1330z	05/08 [527/00] Out 1333z S3 (Dutch SDR)	Malc	THU
	1330z	12/08 [521/40 8566383294] Out 1341z S3 (Dutch SDR)	Malc	THU
	1330z	22/08 [522/00]	HfD	SUN
	1330z	26/08 [528/00] Out 1333z S2	Malc	THU
	1330z	29/08 [522/00] Out 15352 52	Xaver	SUN
	13302	2700 [02200]		5014
5737kHz	13007	01/07 [316/00] Out 1303z S4 (Dutch SDR)	Malc	THU
JIJIAIIZ	1300z	05/07 [313/00] Out 1303z S2 (Dutch 3DK)	Malc	MON
	1300z	12/07 [310/00] Out 1303z S3	Malc	MON
	1500Z	12/01 [310/00] Out 13032 33	ivialC	MOIN

	1300z	15/07 [315/00] Out 1303z S2 (Dutch SDR)	Malc	THU
	1300z	19/07 [316/35 0320851910] Out 1310z S3 (Dutch SDR)	Malc	MON
	1300z	26/07 [314/00] Out 1303z S2	Malc, RNGB	MON
	1300z			THU
		29/07 [311/00] Out 1303z S3	Malc	
	1300z	02/08 [319/00] Out 1303z S2	Malc	MON
	1300z	05/08 [315/00] Out 1303z S2	Malc	THU
	1300z	09/08 [313/00] Out 1303z S3 (Dutch SDR)	Malc	MON
	1300z	12/08 [315/00] Out 1303z S2	Malc	THU
	1300z	16/08 [314/36 1965736065] Out 1310z S4 (Dutch SDR)	Malc	MON
	1300z	23/08 [311/00] Out 1303z S2	Malc	MON
	1300z	26/08 [313/00] Out 1303z S2	Malc	THU
6304kHz	1205z	06/07 [461/00] Out 1208z S2 (Dutch SDR)	Malc	TUE
	1205z	07/07 [464/00] Out 1208z S2	Malc	WED
	1205z	13/07 [465/00] Out 1208z S2 (Dutch SDR)	Malc	TUE
	1205z	20/07 [463/00] Out 1208z S2	Malc	TUE
	1205z	21/07 [462/00] Out 1208z S3	Malc	WED
	1205z	28/07 [466/35 4097180289] Out 1215z S3 (Dutch SDR)	Malc	WED
	1205z	04/08 [469/00] Out 1208z S2	Malc	WED
	1205z	10/08 [464/00] Out 1208z S2	Malc	TUE
	1205z	18/08 [460/32 8383472083] Out 1215z S3+QRM (Dutch SDR)	Malc	WED
	1205z	24/08 [462/00] Out 1208z S3 (Dutch SDR)	Malc	TUE
	1205z	25/08 [461/00] Out 1208z S2 (Dutch SDR)	Malc	WED
	1205z	31/08 [469/00] Out 1208z S2	Malc	TUE
		• · · · · · · · · · · · · · · · · · · ·		
60221-11-	00202	01/07 [270/00] Out 00337 \$2	Male DNCP	тип
6923kHz		01/07 [279/00] Out 0933z S2	Malc, RNGB	THU
	0930z	07/07 [275/36 03666 51213 39976 77932 86260 50891 6011514960 90014] Out 0941z S3	RNGB, Malc	WED
	0930z	08/07 [275/36 03666etc] Repeat of Wednesday	Malc	THU
	0930z	14/07 [276/00] Out 0933z S2	Malc	WED
	0930z	15/07 [278/00] Out 0933z S2	Malc	THU
	0930z	21/07 [279/00] Out 0933z S3	Malc, RNGB	WED
	0930z	22/07 [277/00] Out 0933z S3	Malc	THU
	0930z	28/07 [275/00] Out 0933z S2	Malc, RNGB	WED
	0930z	29/07 [270/00] Out 0933z S2	Malc	THU
	0930z	04/08 [273/31 43540 21056 84453 10450 94782 90336 03490 2551222669 07191] Out 0940z		WED
		•	Malc	THU
	0930z	05/08 [273/31 43450etc] Repeat of Wednesday		
	0930z	11/08 [278/00] Out 0933z S3 (Dutch SDR)	Malc	WED
	0930z	12/08 [276/00] Out 0933z S2	Malc	THU
	0930z	18/08 [270/00] Out 0933z S2	Malc	WED
	0930z	19/08 [278/00]	RNGB	THU
		25/08 [273/00] Out 0933z S2		
	0930z		Malc	WED
	0930z	26/08 [275/00] Out 0933z S2	Malc	THU
7377kHz	0730z	10/07 [491/00] Out 0733z S2	Malc	SAT
	0730z	11/07 [496/00] Out 0733z S2	Malc, HfD	SUN
	0730z	17/07 [496/00] Out 0733z S2	Malc	SAT
	0730z	18/07 [491/00] Out 0733z S3	Malc	SUN
	0730z	25/07 [492/00] Out 0733z S3	Malc	SUN
	0730z	31/07 [490/00] Out 0733z S3	Malc	SAT
	0730z	01/08 [496/00] Out 0733z S3	Malc	SUN
	0730z	07/08 [497/00] Out 0733z S5	Malc, RNGB	SAT
	0730z	08/08 [490/00] Out 0733z S3	Malc Malc	SUN
	0730z	22/08 [496/32 65622 95062 75471 41572 49261 83805 34389 24438 3253363616 28025]	XAH	SUN
	0730z	29/08 [495/00] Out 0733z S3	Malc	SUN
7449kHz	0900z	05/07 [534/36 40204 43847 21564 91645 37086 79381 73786 8075784949] Out 0911z	RNGB, Malc	MON
	0900z	07/07 [534/36 40204etc] Repeat of Monday	Malc	WED
	0900z	12/07 [535/00] Out 0903z S3	Malc	MON
	0900z	14/07 [535/00] Out 0903z S2+QRM	Malc	WED
	0900z	19/07 [535/00] Out 0903z S2	Malc, RNGB	MON
	0900z	21/07 [530/00] Out 0903z S4	Malc	WED
	0900z	26/07 [534/00]	RNGB	MON
	0900z	28/07 [530/00] Out 0903z S3	Malc	WED
	0900z	02/08 [534/00] Out 0903z S2	Malc, RNGB	MON
	0900z	04/08 [530/00] Out 0903z S2	Malc, RNGB	WED
	0900z	09/08 [530/00] Out 0903z S3	Malc	MON
	0900z	11/08 [535/00] Out 0903z S2 + QRM	Malc	WED
	0900z	16/08 [538/00] Out 0903z S2	Malc, RNGB	MON
	0900z			
		18/08 [535/00] Out 0903z S2	Malc	WED
	0900z	23/08 [534/31 4862560155] Out 0909z S2	Malc	MON
	0900z	25/08 [534/31 48625etc] Repeat of Monday	Malc	WED

74601-11-	0450-	10/07 [411/21 10007]	HED	MON
7469kHz	0450z 0450z	19/07 [411/31 19096etc] 02/08 [415/32 09609 42228 53809 67042 73994 56780 51931 1040037447 23057]	HfD Arv	MON MON
	0430Z	02/08 [413/32 09009 42228 33809 07042 73994 30780 31931 1040037447 23037]	Ary	MON
7600kHz	1900z	01/07 [644/00] Out 1903z S5	Malc	THU
7000K112	1900z	05/07 [640/36 8081202083] Out 1911z S9 QSB4	Malc	MON
	1900z	08/07 [640/36 80812etc] Repeat of Monday	Malc	THU
	1900z	15/07 [648/00] Out 1903z S7	Malc	THU
	1900z	19/07 [649/00] Out 1903z S5	Malc	MON
	1900z	22/07 [648/00] Out 1903z S5	Malc	THU
	1900z	26/07 [648/00] Out 1903z S3	Malc	MON
	1900z	29/07 [648/00] Out 1903z S9	Malc, dMHz	THU
	1900z	02/08 [649/00] Out 1903z S9	Malc, RNGB	MON
	1900z	05/08 [649/00] Out 1903z S6	Malc	THU
	1900z	09/08 [643/36 6839641409] Out 1911z S9	Malc	MON
	1900z	12/08 [643/36 68396etc] Repeat of Monday	Malc	THU
	1900z 1900z	16/08 [648/00] Out 1903z S3+QRM 23/08 [640/00] Out 1903z S5	Malc Malc	MON MON
	1900z 1900z	25/08 [649/00] Out 1903z S5 + QRM	Malc	THU
	17002	20/00 [047/00] Out 17032 33 + QKM	Water	1110
7863kHz	1625z	07/07 [974/00] Out 1628z S7	Malc	WED
	1625z	11/07 [972/00] Out 1628z S3 (Dutch SDR)	Malc	SUN
	1625z	18/07 [970/34 8381969424] Out 1635z S6	Malc	SUN
	1625z	21/07 [978/00] Out 1628z S3	Malc	WED
	1625z	28/07 [976/00] Out 1628z S4	Malc	WED
	1625z	01/08 [972/00] Out 1628z S3	Malc	SUN
	1625z	04/08 [976/00] Out 1628z S3	Malc	WED
	1625z	08/08 [976/00] Out 1628z S4	Malc	SUN
	1625z	11/08 [977/00] Out 1628z S5	Malc, XAH	WED
	1625z	15/08 [977/00] Out 1628z S4	Malc	SUN
	1625z	18/08 [977/00] Out 1628z S4	Malc	WED
	1625z	22/08 [976/00]	XAH	SUN
	1625z	25/08 [970/30 3210446033] Out 1635z S6	Malc	WED
	1625z	29/08 [970/30 32104etc] Repeat of Wednesday	Malc, Xaver	SUN
8088kHz	1730z	01/07 [413/00] Out 1733z S3	Malc	THU
OOOOKIIZ	1730z	15/07 [412/00] Out 1733z S2	Malc	THU
	1730z	22/07 [411/31 1909633935] Out 1739z S5	Malc	THU
	1730z	29/07 [410/00] Out 1733z S3	Malc	THU
	1730z	05/08 [415/32 0960913057] Out 1740z S3	Malc	THU
	1730z	12/08 [411/00] Out 1733z S5	Malc	THU
	1730z	26/08 [410/00] Out 1733z S9	Malc	THU
8091kHz		01/07 [511/00] Out 0648z S3	Malc	THU
	0645z	06/07 [512/00] Out 0648z S4	Malc, RNGB	TUE
	0645z	08/07 [510/00] Out 0648z S2	Malc	THU
	0645z	13/07 [512/00] Out 0648z S3	Malc, RNGB	TUE
	0645z	15/07 [514/00] Out 0648z S5	Malc, RNGB	THU
	0645z	20/07 [512/00] Out 0648z S6	Malc	TUE
	0645z	22/07 [510/00] Out 0648z S5	Malc, RNGB	THU
	0645z 0645z	27/07 [519/35 6715133745] Out 0655z S3 29/07 [519/35 67157etc] Repeat of Tuesday	Malc Malc	TUE THU
	0645z	03/08 [512/00] Out 0648z S4	Malc, RNGB	TUE
	0645z	05/08 [512/00] Out 06482 S4 05/08 [519/00] Out 06482 S3	Malc, KNGB	THU
	0645z	10/08 [515/35 27926 14134 21232 37346 37050 35217 25487 1324551777 55256]	RNGB, Malc	TUE
	0645z	12/08 [515/35 27926etc] Repeat of Tuesday	Malc	THU
	0645z	17/08 [518/00] Out 0648z S2	Malc	TUE
	0645z	24/08 [517/00] Out 0648z S2	Malc	TUE
	0645z	26/08 [512/00] Out 0648z S4	Malc, RNGB	THU
	0645z	31/08 [512/00] Out 0648z S2	Malc	TUE
8545kHz		05/07 [691/00] Out 1048z S3	Malc	MON
	1045z	14/07 [690/00] Out 1048z S3	Malc, HfD	WED
	1045z	19/07 [692/24 8725903398] Out 1053z S2	Malc	MON
	1045z	21/07 [692/24 87259etc] Repeat of Monday	Malc	WED
	1045z	28/07 [692/00] Out 1048z S5	Malc	WED
	1045z	02/08 [696/37 3878233795] Out 1056z	Malc	MON
	1045z	04/08 [696/37 38782etc] Repeat of Monday	Male YAII	WED
	1045z	09/08 [698/00] Out 1048z S2	Malc, XAH	MON
	1045z 1045z	11/08 [698/00] Out 1048z S2 16/08 [692/00] Out 1048z S3	Malc Malc	WED MON
	1045z 1045z	18/08 [696/00] Out 1048z S3	Malc	WED
	1045z	25/08 [694/00] Out 1048z S2	Malc	WED
	10 102		1.1010	11 LD

8680kHz	0700z	02/07 [570/00] Out 0703z S3	Malc	FRI
	0700z	06/07 [573/00] Out 0703z S4	Malc, RNGB	TUE
	0700z	09/07 [576/00] Out 0703z S5	Malc, RNGB	FRI
	0700z	13/07 [574/00] Out 0703z S3	Malc	TUE
	0700z	16/07 [577/00] Out 0703z S2	Malc	FRI
	0700z	20/07 [574/00] Out 0703z S5	Malc	TUE
	0700z	23/07 [573/00] Out 0703z S3	Malc, RNGB	FRI
	0700z	27/07 [570/31 99369 69484 00682 36841 62165 23003 84210 9427957421 33745] Out 0709z	RNGB, Malc	TUE
	0700z	30/07 [570/31 99369etc] Repeat of Tuesday	Malc	FRI
	0700z	03/08 [577/00] Out 0703z S4	Malc, RNGB	TUE
	0700z	06/08 [570/00] Out 0703z S4	Malc, RNGB	FRI
	0700z	10/08 [575/00] Out 0703z S4	Malc	TUE
	0700z	13/08 [570/00] Out 0648z S2	Malc, XAH	FRI
	0700z	17/08 [573/35 71261 01149 50283 61139 24378 24604 74964 6915548714 54417] Out 0710z	RNGB, Malc	TUE
	0700z	24/08 [571/00] Out 0703z S3	Malc	TUE
	0700z	27/08 [576/00] Out 0703z S4	Malc	FRI
	0700z	31/08 [577/00] Out 0703z S2	Malc	TUE
9060kHz	0300z	23/07 [184/00]	HfD	FRI
	0300z	30/08 [189/00]	HfD	MON
9150kHz	0600z	16/07 [353/00]	RNGB, HfD	FRI
) 10 OM12	0600z	18/07 [354/00] Out 0603z S6	Malc	SUN
	0600z	25/07 [354/34 6474465791] Out 0610z S4	Malc	SUN
	0600z	20/08 [355/33 08690 68040 35660 65537 74044 63562 48691 9197146433 83200]	XAH, HfD	FRI
	0600z	29/08 [355/00]	XAH	SUN
	00002	25/00 [333/00]	747411	BOIT
9610kHz	07457	05/07 [267/00] Out 0748z S5	Malc, RNGB	MON
JOTORILE	1910z	09/07 [613/00] Out 1913z S7	Malc	FRI
	1910z	11/07 [612/00] Out 1913z S9	Malc	SUN
	0745z	12/07 [266/00] Out 0748z S5	Malc	MON
	1910z	16/07 [611/32 5747120109] Out 1913z S3	Malc	FRI
	1910z	18/07 [611/32 57471etc] Repeat of Friday	Malc	SUN
	0745z	19/07 [268/00] Out 0748z S4	Malc, RNGB	MON
	1910z	23/07 [614/00] Out 1913z S5	Malc Malc	FRI
	1910z	25/06 [611/00] Out 1913z S4	Malc	SUN
	0745z	25/06 [011/06] Out 19132 54 26/07 [260/35 0506447775] Out 0755z S6	Malc	MON
	1910z	30/07 [610/00] Out 1913z S6	Malc, Gary H	FRI
	0745z	02/08 [267/00] Out 0748z S2	Male, RNGB	MON
	1910z	06/08 [614/00] Out 1913z S9	Malc Malc	FRI
	1910z 1910z		Malc	SUN
		08/08 [611/00] Out 1913z S9		
	0745z	09/08 [267/32 9454778030] Out 0755z S4 13/08 [616/00] Out 1913z S9	Malc Mala	MON FRI
	1910z		Malc	
	1910z	15/08 [616/00] Out 1913z S6	Malc	SUN
	0745z	16/08 [267/00] Out 0748z S3	Malc, RNGB	MON
	0745z	23/08 [269/00] Out 0748z S7	Malc	MON
	1910z	29/08 [618/34 2278769614] Out 1920z S7	Malc	SUN
102571-11-	1520-	01/07 [2(0/00] 0 1522_ 95	M-1-	THE
10356kHz		01/07 [260/00] Out 1533z S5	Malc Mala	THU
	1530z	08/07 [266/00] Out 1533z S6 15/07 [264/00] Out 1533z S4	Malc Malc, Gary H	THU
	1530z 1530z	15/07 [264/00] Out 1533z S4 22/07 [264/00] Out 1533z S7	Malc, Gary H Malc	THU THU
	1530z	29/07 [260/35 05064 18162 31974 18855 75769 10037 4304241920 47775] Out 1540z S9	dMHz, Malc	THU
	1530z	05/08 [265/00] Out 1533z S6	Malc	THU
	1530z	12/08 [267/32 9454778030] Out 1339z S2 (Dutch SDR)	Malc	THU
	1530z	26/08 [268/00] Out 1533z S9	Malc	THU
10420111	0715	00/07 [(20/00] 0 + 0710   02	N. 1	EDI
10429kHz		02/07 [630/00] Out 0718z S3	Male PNCP	FRI
	0715z	06/07 [634/00] Out 0718z S3	Male, RNGB	TUE
	0715z	09/07 [639/00] Out 0718z S5	Male, RNGB	FRI
	0715z	13/07 [636/00] Out 0718z S2	Male, RNGB	TUE
	0715z	16/07 [637/00] Out 0718z S3	Malc BNCB Mala	FRI
	0715z	20/07 [633/32 52315 97592 73288 45527 71091 51335 73607 6814876881] Out 0725z S3	RNGB, Malc	TUE
	0715z	23/07 [633/32 52315etc] Repeat of Tuesday	Malc	FRI
	0715z	27/07 [637/00] Out S6	Malc, RNGB	TUE
	0715z	30/07 [637/00] Out 0718z S3	Malc, RNGB	FRI
	0715z	03/08 [636/00] Out 0718z S4	Malc	TUE
	0715z	06/08 [630/00] Out 0718z S5	Malc, RNGB	FRI
	0715z	10/08 [635/00] Out 0718z S4	Malc	TUE
	0715z	13/08 [635/00] Out 0718z S3	Malc, XAH	FRI
	0715z	17/08 [630/00] Out 0718z S2	Malc	TUE

0715z	24/08 [637/32 47141 04810 34214 22318 29213 67836 75529 1351014624 50133] Out 0724z	DNCD Mala	TUE
0715z	24/08 [637/32 47141 04810 34214 22518 29213 67836 75329 1551014624 50155] Out 07242 27/08 [637/32 47141etc] Repeat of Tuesday	Malc	FRI
0715z	31/08 [634/00] Out 0718z S3	Malc	TUE
07132	31/00 [034/00] Out 0/102.83	Water	TOL
12153kHz 0845z	01/07 [151/00] Out 0848z S7 QSB4	Malc, RNGB	THU
1000z	02/07 [302/00] Out 1003z S3	Malc	FRI
0845z	06/07 [159/00] Out 0848z S5	Malc, RNGB	TUE
1000z	06/07 [306/29 4527308909] Out 1009z S6	Malc	TUE
0845z	08/07 [151/00] Out 0848z S2	Malc	THU
1000z	09/07 [306/29 45273etc] Repeat of Tuesday	Malc	FRI
0845z	13/07 [155/00] Out 0848z S4	Malc	TUE
1000z	13/07 [302/00] Out 1003z S2	Malc	TUE
0845z	15/07 [150/00] Out 0848z S2	Malc, RNGB	THU
1000z	16/07 [308/00] Out 1003z S3	Malc	FRI
0845z	20/07 [157/00] Out 0848z S7	Malc	TUE
1000z	20/07 [300/00] Out 1003z S3	Malc	TUE
0845z	22/07 [152/00] Out 0848z S2	Malc, RNGB	THU
1000z	23/07 [305/00] Out 1003z S6	Malc	FRI
0845z	27/07 [154/36 6141283646] Out 0855z S2	Malc	TUE
1000z	27/07 [307/00] Out 1003z S3	Malc	TUE
0845z	29/07 [154/36 61412 12242 43425 76233 00165 24868 58819 1407893941 83646]	RNGB, Malc	THU
1000z	30/07 [306/00] Out 1003z S3	Malc, RNGB	FRI
0845z	03/08 [156/00] Out 0848z S4	Malc, RNGB	TUE
1000z	03/08 [304/00] Out 1003z S5	Malc, RNGB	TUE
0845z	05/08 [151/00] Out 0848z S3	Malc	THU
1000z	06/08 [305/00] Out 1003z S5	Malc	FRI
0845z	10/08 [151/00] Out 0848z S4	Malc	TUE
1000z	10/08 [304/00] Out 1003z S4	Malc	TUE
0845z	12/08 [156/00] Out 0848z S6	Malc	THU
1000z	13/08 [309/00] Out 1003z S4	Malc	FRI
0845z	17/07 [155/29 053560708]8 Out 0854z S3	Malc	TUE
1000z	17/08 [306/24 08131 81440 4515137965 34015 61662] Out 1008z S3	RNGB, Malc	TUE
0845z	24/08 [151/00] Out 0848z S3	Malc	TUE
1000z	24/08 [300/00] Out 1003z S4	Malc	TUE
0845z	26/08 [156/00] Out 0848z S7	Malc	THU
0845z	31/08 [154/00] Out 0848z S3	Malc	TUE
1000z	31/08 [300/00] Out 1003z S9	Malc	TUE
12229kHz 1650z	09/07 [924/00] Out 1653z S3	Malc	FRI
1650z	11/07 [924/00] Out 1653z S6	Malc	SUN
1650z	16/07 [920/00] Out 1653z S3	Malc	FRI
1650z	18/07 [925/00] Out 1653z S5	Malc	SUN
1650z	23/07 [924/00] Out 1653z S5	Malc	FRI
1650z	25/07 [920/00] Out 1653z S4	Malc	SUN
1650z	30/07 [922/00] Out 1653z S3	Malc, RNGB	FRI
1650z	01/08 [920/00] Out 1653z S3	Malc	SUN
1650z	06/08 [926/00] Out 1653z S4	Malc	FRI
1650z	08/08 [922/00] Out 1653z S3	Malc	SUN
1650z	13/08 [922/32 7392408534] Out 1700z S3	Malc	FRI
1650z	15/08 [922/32 73924etc] Repeat of Friday	Malc	SUN
1650z	29/08 [926/00] Out 1653z S2	Malc	SUN
12815kHz 0845z	05/07 [716/00] Out 0848z S3	Malc	MON
0845z	07/07 [715/00] Out 0848z S2	Malc, RNGB	WED
0845z	12/07 [715/33 22177 18950 34883 98201 95828 71221 52535 9285424113 35352] Out 0855z	RNGB, Malc	MON
0845z	14/07 [715/33 22177etc] Repeat of Monday	Malc	WED
0845z	19/07 [714/00] Out 0848z S3	Malc	MON
0845z	21/07 [711/00] Out 0848z S5	Malc	WED
0845z	26/07 [719/00] Out 0848z S5	Malc	MON
0845z	28/07 [713/00] Out 0848z S3	Malc	WED
0845z	02/08 [710/00] Out 0848z S3	Malc, RNGB	MON
0845z	04/08 [715/00] Out 0848z S4	Malc, RNGB	WED
0845z	09/08 [719/00] Out 0848z S3	Malc	MON
0845z	11/08 [718/00] Out 0848z S4	Malc	WED
0845z	16/08 [711/31 52734 20465 34002 44812 56568 33519 4859244267 02780] Out 0855z S3	RNGB, Malc	MON
0845z	18/08 [711/31 52734etc] Repeat of Monday	Malc	WED
0845z	23/08 [719/00] Out 0848z S5	Malc	MON
0845z	25/08 [716/00] Out 0848z S4	Malc	WED
12984kHz 1345z	06/07 [911/00] Out 1348z S3	Malc	TUE
1345z	10/07 [912/00] Out 1348z S5 (Dutch SDR)	Malc	SAT
1345z	13/07 [922/39 99093 27689] Out 1348z S2	Malc	TUE

1345z	17/07 [911/39 99093etc] Repeat of Tuesday	Malc	SAT
1345z	20/07 [912/00]	RNGB	TUE
1345z	24/07 [917/00] Out 1348z S3	Malc	SAT
1345z	27/07 [919/00] Out 1348z S2	Malc	TUE
1345z	31/07 [919/00] Out 1348z S3	Malc	SAT
1345z	03/08 [912/00] Out 1348z S3	Malc	TUE
1345z	07/08 [918/00] Out 1348z S3	Malc	SAT
1345z	10/08 [911/00] Out 1348z S3	Malc	TUE
1345z	17/08 [915/00] Out 1348z S3	Malc	TUE
1345z	24/08 [912/35 3809871580] Out 1355z S3	Malc	TUE
1345z	31/08 [918/00] Out 1348z S2	Malc	TUE
14410kHz 1745z	05/07 [247/00] Out 1748z S9	Malc	MON
1745z	11/07 [245/00] Out 1748z S4	Malc	SUN
1745z	18/07 [248/31 6693695291] Out 1755z	Malc	SUN
1745z	19/07 [247/00] Out 1748z S8	Malc	MON
1745z	25/07 [249/00] Out 1748z S2+QRM	Malc	SUN
1745z	26/07 [244/00] Out 1748z S3+QRM	Malc	MON
1745z	08/08 [242/00] Out 1748z S2 + QRM	Malc	SUN
1745z	09/08 [249/33 3763522389] Out 1735z S3 + QRM	Malc	MON
1745z	15/08 [249/33 37735etc] Repeat of Monday	Malc	SUN
1745z	16/08 [245/00] Out 1748z S2	Malc	MON
1745z	23/08 [242/00] Out 1748z S2	Malc	MON
1745z	29/08 [246/00] Out 1748z S2 (Dutch SDR)	Malc	SUN
1745z	30/08 [246/00]	HfD, XAH	MON
17432	30/00 [240/00]	IIID, AAII	WIOIN
	04.00.000.000.000.000.000	nyan	
14575kHz 1645z	01/07 [332/00] Out 1648z S2	Malc, RNGB	THU
1645z	06/07 [335/00] Out 1648z S5	Malc, RNGB	TUE
1645z	13/07 [335/34 9021624455] Out 1655z S3	Malc	TUE
1645z	15/07 [335/34 90216etc] Repeat of Tuesday	Malc	THU
1645z	- · · · · · · · · · · · · · · · · · · ·	Malc	TUE
	20/07 [334/00] Out 1648z S2 (Dutch SDR)		
1645z	22/07 [330/00] Out 1648z S4	Malc	THU
1645z	27/07 [338/00] Out 1648z S3	Malc	TUE
1645z	29/07 [332/00] Out 1649z S2	Malc	THU
1645z	03/08 [337/00] Out 1648z S3	Malc, RNGB	TUE
1645z	05/08 [333/00] Out 1648z S2	Malc, RNGB	THU
1645z	10/08 [332/00] Out 1648z S3	Malc	TUE
1645z	12/08 [335/00] Out 1648z S2	Malc	THU
1645z	17/08 [337/36 8286317204] Out 1655z S3	Malc	TUE
1645z	24/08 [333/00] Out 1648z S2 (Dutch SDR)	Malc	TUE
1645z	26/08 [330/00] Out 1648z S3 (Dutch SDR)	Malc	THU
	,		
1645z	29/08 [333/00] Out 1648z	XAH	SUN
1645z	31/08 [331/00] Out 1648z S2 (Dutch SDR)	Malc	TUE
14940kHz 0745z	01/07 [224/00] Out 0748z S6	Malc, RNGB	THU
0745z	06/07 [223/00] Out 0748z S5	Malc, RNGB	TUE
0745z	08/07 [221/00] Out 0748z S3	Malc, RNGB	THU
0745z	13/07 [223/00] Out 0748z S4	Malc	TUE
0745z	15/07 [221/00] Out 0748z S9	Malc, RNGB	THU
0745z	20/07 [229/00] Out 0748z S9	Malc, RNGB	TUE
0745z	22/07 [225/00] Out 0748z S5	Malc	THU
0745z	27/07 [224/34 5873701993] Out 0755z S3	Malc	TUE
0745z	29/07 [224/34 58737etc] Repeat of Tuesday	Malc	THU
0745z	03/08 [220/00] Out 0748z S5	Malc, RNGB	TUE
0745z	05/08 [223/00] Out 0748z S4	Malc	THU
0745z	10/08 [223/00]	RNGB, Malc	TUE
0745z	12/08 [224/00] Out 0748z S5	Malc, ,XAH	THU
0745z	17/08 [220/00] Out 0748z S2	Malc, RNGB	TUE
0745z	24/08 [221/32 90203 50799 45180 85684 49848 33014 5504656397 40914] Out 0754z S5	RNGB, Malc	TUE
0745z	26/08 [221/32 90203etc] Repeat of Tuesday	Malc	THU
0745z	31/08 [220/00] Out 0748z S4	Malc	TUE
15720kHz 0745z	02/07 [346/00] Out 0748z S3	Malc, RNGB	FRI
0745z	07/07 [346/00] Out 0748z S2	Malc, RNGB	WED
0745z	09/07 [342/00] Out 0748z S3	Malc, RNGB	FRI
0745z	14/07 [343/00] Out 0748z S4 QSB2	Malc	WED
0745z	16/07 [348/00] Out 0748z S2	Malc	FRI
0745z	21/07 [346/00] Out 0718z S2	Malc	WED
0745z	23/07 [342/00] Out 0748z S3	Malc RNGB	FRI
0745z	28/07 [348/37 93266 07713 74263 34297 14733 55863 95087 0753594933 07191] Out 0756z		WED
0745z	30/07 [348/37 93266etc] Repeat of Wednesday	Malc	FRI
0745z	04/08 [346/00] Out 0748z S3	Malc	WED

0745z	06/08 [346/00] Out 0748z S3	Malc	FRI
0745z	06/08 [346/00] Out 0748z S3	Malc, RNGB	FRI
0745z	11/08 [342/00] Out 0748z S3	Malc	WED
0745z	13/08 [342/00] Out 0748z S2	Malc	FRI
0745z	18/08 [349/31 4620821233] Out 0755z S6	Malc	WED
0745z	25/08 [346/00] Out 0748z S3	Malc	WED
0745z	27/08 [346/00] Out 0748z S2	Malc	FRI
15000111 0640	05/07 [040/00] 0 4 0742 - 02	M.I. DNCD	MON
15800kHz 0640z	05/07 [948/00] Out 0643z S3	Malc, RNGB	MON
0640z	07/07 [948/00] Out 0643z S4	Malc	WED
0640z	12/07 [941/27 96687	Male	MON
0640z 0640z	14/07 [941/27 96687etc] Repeat of Monday	Malc Malc	WED
0640z	19/07 [942/00] Out 0643z S5 21/07 [945/00] Out 0643z S3	Malc	MON WED
0640z	26/07 [944/00] Out 0643z S3	Malc	MON
0640z	28/07 [948/00] Out 00432 S3 28/07 [948/00] Out 0643z S3	Malc	WED
0640z	02/08 [942/00] Out 0643z S3	Malc	MON
0640z	04/08 [949/00] Out 0643z S2	Malc	WED
0640z	09/08 [940/00] Out 0643z S5	Malc	MON
0640z	11/08 [945/00] Out 0643z S4	Malc	WED
0640z	16/08 [941/30 47862 13259 89972 41130 24360 76779 171468726303757] Out 0650z S4	RNGB, Malc	MON
0640z	18/08 [941/30 47862etc] Repeat of Monday	Malc	WED
0640z	23/08 [945/00] Out 0643z S2 (Dutch SDR)	Malc	MON
0640z	25/08 [941/00] Out 0643z S3	Malc	WED
00402	23/00 [741/00] Out 00432 53	Water	WED
17378kHz 0820z	06/07 [131/00] Out 0823z S5	Malc, RNGB	TUE
0820z	07/07 [135/00] Out 0823z S2	Malc, RNGB	WED
0820z	13/07 [138/37 80982 94025 33434 15838 23450 31054 83371 9703127545 72149] Out 0831z	RNGB, Malc	TUE
0820z	14/07 [138/37 80982etc] Repeat of Tuesday	Malc	WED
0820z	20/07 [138/00] Out 0823z S3	Malc, RNGB	TUE
0820z	21/07 [135/00] Out 0823z S2	Malc	WED
0820z	27/07 [136/00] Out 0823z S2	Malc	TUE
0820z	28/07 [131/00] Out 0823z S2	Malc, RNGB	WED
0820z	03/08 [131/00] Out 0823z S7 QSB4	Malc, RNGB	TUE
0820z	04/08 [138/00] Out 0823z S2	Malc, RNGB	WED
0820z	10/08 [136/35 5615262114] Out 0830z S2	Malc	TUE
0820z	11/08 [136/35 56152etc] Repeat of Tuesday	Malc	WED
0820z	17/08 [131/00] Out 0823z S2	Malc, RNGB	TUE
0820z	18/08 [133/00] Out 0823z S4	Malc	WED
0820z	24/08 [131/00] Out 0823z S2	Malc	TUE
0820z	25/08 [136/00] Out 0823z S2 (Dutch SDR)	Malc	WED
0820z	31/08 [131/00] Out 0823z S2 (Dutch SDR)	Malc	TUE
18030kHz 0715z	05/07 [751/00] Out 0718z S7 QSB4	Malc, RNGB	MON
0715z	07/07 [751/00] Out 0718z S3	Malc, KIVOD	WED
0715z	14/07 [757/00] Out 0718z S4	Malc	WED
0715z	19/07 [750/32 35674 78591 71668 70779 36552 10927 81753 4716739164 46837] Out 0725z	RNGB, Malc	MON
0715z	21/07 [750/32 35674 76591 71668 76777 36332 16727 81733 4716737164 46637] Out 67232	Malc	WED
0715z	26/07 [753/00] Out 0718z S3	Malc	MON
0715z	28/07 [752/00] Out 0718z S3	Malc	WED
0715z	02/08 [750/00] Out 0718z S3	Malc, RNGB	MON
0715z	04/08 [753/00] Out 0718z S2 (Dutch SDR)	Malc Malc	WED
0715z	09/08 [750/00] Out 0718z S2 (Dutch SDR)	Malc, RNGB	MON
0715z	11/08 [759/00] Out 0715z S7	Malc Malc	WED
0715z	16/08 [754/00] Out 0718z S3	Malc, RNGB	MON
0715z	18/08 [757/00] Out 0718z S4	Malc, RNGB	WED
0715z	23/08 [757/32 67324 24971 77578 05605 90908 55356 5138846983 3484034840] Out 0725z	RNGB, Malc	MON
0715z	25/08 [757/32 67324etc] Repeat of Monday	Malc	WED
0,15L			.,

# E17z

#### Thursday

July 2021

 0800z
 16780kHz
 0810z
 12850kHz

 01/07
 217 463 5 01405 15003 24357 60583 54545 463 5 00000
 [0810z Dutch SDR]
 Weak

 29/07
 217 00000 [in Russian]
 Weak

August 2021

0800z 16780kHz 0810z 12850kHz [Best heard in narrow AM]

12/08 217 438 5 21767 53672 11834 81022 36903 438 5 00000 [0800z Dutch SDR] Weak

# **S06**

6th/13th

20th/27th

6th/13th

20th/27th

1000/1010z

1100/1110z

4820/5660

6810/7560

#### S06 log July 2021

Thursday	ys (Repeats Friday)	0830z 15875kHz	0930z 13469kHz	
08/06	'842' 307 45 93002 90685 06312 57614 90	0677 17072 71158 60779 72930	19373 32282 86675 6464	93257 99358 15298 98851 44341 77487 32280
	79406 45136 70707 40203 06	5186 04991 50438 94592 23885	57703 12321 81820 8025	3 96507 69854 81084 04772 11099 58303 77663
	43610 06400 47285 19620 11	1966 307 45 00000		
15/07	'842' 915 46 58712 64748 28958 06285 30	0117 39201 78874 96778 50319	94785 09250 08879 01679	54607 67132 10418 61323 69121 03891 28726
	93325 70787 17251 04561 37	7084 09686 98116 69949 15317	87275 68110 79658 1013	2 30483 18776 50957 80600 73313 88380 91368
	20272 38171 37251 19098 78	8062 34063 915 46 00000		
22/07	'842' 360 47 87123 48191 65101 41732 81	283 66149 76519 36152 86020	83001 76521 64356 1559	11443 10483 37779 24910 89603 62301 17093
	98253 18621 10981 38886 01	1463 17101 71685 64710 45873	34657 32216 07164 3753	91730 20818 12732 10094 37855 66287 06035
	64876 45572 36296 25206 66	5435 82180 64871 360 47 0000	)	
29/07	'842' 159 48 51319 76665 59456 95915 26	5791 29379 34856 07367 32775	85264 55738 77148 9908	56469 73141 86999 42107 38330 06024 18009
	73797 98267 04436 60255 18	3649 04212 10458 11213 74461	72285 15315 55117 7791	4 38399 36135 40472 60858 83465 60765 97892
	08271 66918 34092 65460 53	8805 48207 84307 13795 159 4	3 00000	

 Other:
 0400z
 11616khz
 0420z
 9322kHz

 16/07
 '480' 279 56 47454 10864 28026 51429 66600 09127 59640 49181 44672 00649 95998 89482 62460 89646 34541 16252 98123 34762 02696 12796
 12796

 74032 52025 16493 13622 09572 47614 88092 60875 97088 66341 11950 53847 43166 66783 84257 64982 42425 59029 15389 20829
 12796

 76025 65947 80014 71372 52067 93933 14578 93177 30073 24065 16831 20792 96734 59607 27099 41834 279 56 00000
 1834 279 56 00000

Fridays (1st & 3rd) 2000z 9475khz 2100z 7561kHz 16/07 '768' 00000 S06s July log: Monday 5th/12th0630/0640z 16320/14875 '462' 975 8 88569 89617 25757 77159 95225 84090 09531 88430 '462' 910 5 17099 94961 35826 56906 77233 19th/26th '764' 925 8 96111 10544 98003 68909 45279 43828 55581 20044 5th/12th 0830/0840z 8221/9353 19th/26th '764' 819 5 33796 13577 74526 46647 79302 5th/12th 0900/0910z 16380/14835 '232' 480 5 26634 14690 95590 60386 03009 <sup>,</sup>232, 984 5 52343 79628 42432 56075 65281 19th/26th 5th/12th 1200/1210z 10230/12165 '149' 873 6 21767 53672 11834 81022 36903 41412 '149' 835 6 89758 52343 79628 42432 86415 63156 19th/26th Tuesday 6th/13th 0600/0610z 15945/16945 '438' 297 5 46062 68672 97478 39685 30485 20th/27th 438' 967 5 42997 84706 47374 34694 64385 6th/13th 0700/0710z 5430/6780 ·452<sup>,</sup> 890 6 57440 10597 23521 47660 92883 96802 20th/27th '452' 873 6 79302 16070 15009 54545 88554 62620 0730/0740z '427' 913 5 88146 57856 98835 46186 16945 6th/13th 7365/11655 427, 938 5 51726 25901 56281 63156 55137 20th/27th6th/13th 0800/0810z 14373/12935 127' 835 6 68672 97478 39685 30485 96632 53317 20th/27th 

'427' 805 6 47665 93092 48521 63888 92060 11749

'265' 840 7 76342 54545 34140 78386 91497 82963 24162

'427' 861 5 99562 77233 61987 08531 34694

'265' 941 7 67901 30485 96632 52343 81763

Wednesday			
7th/14th	0830/0840z	11565/12560	'464' 278 5 22264 54382 92703 06321 33468
21st/28th			'464' 293 5 90406 36113 31107 37806 37137
7th/14th	1000/1010z	14580/16020	<sup>,</sup> 276 <sup>,</sup> 431 5 77821 14869 62733 77538 48223
21st/28th			<sup>276</sup> , 489 5 43247 43380 48080 36478 38013
Thursday			
1st/8th	0730/0740	11530/14977	172, 498 2 11171 64382 82707 06123 22536
15th/22nd			172' 896 5 21767 53672 11834 81022 36903
1st/8th (E17z)	0800/0810z	16780/12850	'217' 463 5 01405 15003 24357 60583 54545
15th/22nd			'217' 436 5 46062 68672 97478 39685 30485
29th			'217' 00000
1st/8th	0930/0940z	9255/10325	698' 247 5 96111 10544 98003 68909 45279
15th/22nd			698' 234 5 05899 50387 45847 23013 89758
1st/8th	1200/1210z	13145/14535	'175' 438 6 47665 94092 48521 63888 92060 11749
15th/22nd			175' 982 6 33796 13577 74526 46647 79302 53516
Friday			
2nd/9th	0830/0840z	10290/9655	156' 892 7 33796 11160 43494 37638 16070 34140 36717
16th/23rd			156' 834 7 23013 89758 52343 79628 42432 56075 56281
2nd/9th	0900/0910z	6844/7161	<sup>239</sup> , 817 5 40614 77249 40678 17976 22536
16th/23rd			<sup>239</sup> 804 5 42994 94174 47374 74154 08531
Saturday			
3rd	0800/0810z	12460/10250	132' 804 5 68734 24316 57684 79734 23412

Note: Last Thursday of month E17z was sent as S06s with null message.

### S06 log August 2021

Thursday	nys (Repeats Friday)	830z	16327kHz	0	930z	13875kHz
05/08	'842' 706 49 03584 16108 20847 41685 8931	8 58409 5	31955 52561 (	07003 9645	6 55857	68034 02372 54218 03833 76701 54411 81672 96046 05739
	05721 00388 58181 47778 1563	2 62861 (	06901 32023 3	34522 1782	24 45114	44278 22750 98686 72952 25610 62662 77316 25412 04290
	37103 50334 72588 40741 7286	7 50123 4	43456 90149	72527 706	49 00000	0
12/08	'842' 193 50 66984 35986 28279 87308 0107	5 41932 2	25997 68469 3	32911 4719	1 62265	94632 07574 13467 02126 57596 02018 14361 42674 29329
	73500 76273 61349 77147 0423	5 85275 €	59001 57810	65578 121	11 53681	83238 50411 62539 26100 91524 46933 41198 02674 05940
	52425 14165 87111 86608 5040	0 88422 3	36476 04553 9	99554 5040	)4 193 50	0 00000] 0842z
19/08	'842' 657 30 23839 25814 76655 82805 3373	2 16636 3	34330 72882 1	12087 4540	9 49040	29857 60063 30804 53468 88791 86260 57192 51391 53113
	05537 62513 25728 78611 7777	1 25832 4	45131 50118	10012 7180	08 657 30	00000
26/08						68880 35124 27169 97296 51379 33672 02811 53198 35264
						81661 05373 76433 65261 57125 80588 71186 78402 49689
	27601 76731 06103 25879 8595	1 00326 (	)7386 69456 9	92688 9338	38 45281	00236 45198 901 53 00000
Other:	0	400z	11616khz	0	420z	9322kHz
02/08	· · · · · · · · · · · · · · · · · · ·					14894 89609 41004 70195 17900 93392 21952 76397 12764
						07024 24696 83051 85673 82320 54852 47018 95555 02586
	13483 41835 53645 91466 4213	9 66837 8	39498 36171 4	49006 9866	51 39888	63510 57867 79840 10520 42217 88424 64132 21431 03710
	28899 235 61 00000					
16/08	'480' 521 51 32733 46433 37391 84071 0000	3 32668 8	37827 81698 6	60971 2970	74123	19376 83751 32672 19717 28422 70620 56345 90483 73060
	91878 73199 28644 38686 2097	5 57776 1	18409 78841 (	63087 983	51 88042	44306 94354 61819 78052 42759 53932 22742 30166 02446
	56072 92491 76805 38286 1440	8 09430 3	35735 43859 9	95637 760	52 17503	521 51 00000
19/08						02073 86180 67658 99488 04591 03640 10444 46621 85114
						34981 98147 60998 15648 42369 25791 29195 88848 81079
		0 02504 7	74299 55791	16457 1408	34 39931	13927 13568 14508 29988 71761 79838 28139 93404 84583
	19819 573 61 00000					

All of the above reports of ID 480 gratefully received from Ary

 Fridays
 (1st & 3rd)
 1900z
 9475khz
 2000z
 7561kHz

 06/08
 '768' 00000
 (used 9462kHz)

S06s August log: Monday			
2nd/9th	0630/0640z	16320/14875	'462' 803 5 33024 21272 25876 25426 88224
16th/23rd	0030/00402	10320/14673	'462' 503 7 01405 15003 24357 60583 54545 50128 99477
2nd/9th	0830/0840z	8221/9353	'764' 802 5 67034 28277 88421 41298 27232
16th/23rd	0630/06402	0221/9333	'764' 813 5 40614 64385 82707 06123 22536
2nd/9th	0900/0910z	16380/14835	'232' 867 5 21828 42247 46820 17928 44282
16th/23rd	0900/0910Z	10360/14633	'232' 846 5 33696 13577 74526 46647 79302
2nd/9th	1200/1210z	10230/12165	'149' 806 5 82473 88702 92807 91272 42474
16th/23rd	1200/12102	10230/12103	'149' 807 5 37450 46501 31053 44246 31824
10th/23fd			147 007 5 57450 40501 51055 44240 51024
Tuesday			
3rd/10th	0600/0610z	15945/16945	'438' 960 5 12953 28475 17992 18272 50903
17th/24th			'438' 912 5 31828 32247 46840 37936 44753
3rd/10th	0700/0710z	5430/6780	'452' 963 7 40614 77249 40678 17976 21816 21851 78531
17th/24th			'452' 937 6 13621 26252 82057 44817 89106 37937
3rd/10th	0730/0740z	7365/11655	'427' 918 5 88146 57856 98835 46186 16945
17th/24th			'427' 935 6 61881 60151 56499 37086 11887 44066
3rd/10th	0800/0810z	14373/12935	127' 946 5 33796 13577 74526 46647 79302
17th/24th			127' 905 6 99183 39237 75604 14597 72729 44766
3rd/10th	1000/1010z	4820/5660	'427' 519 6 52401 63919 92699 14600 74248 48154
17th/24th			'427' 859 6 21015 82225 23414 73699 34332 53422
3rd/10th	1100/1110z	6810/7560	'265' 831 7 46062 68672 97478 39685 30485 96632 52537
17th/24th			'265' 493 7 73834 36679 05666 60982 08338 47373 40174
Wednesday			
4th/11th	0830/0840z	11565/12560	'464' 890 5 43247 32329 48080 36778 39013
18th/25th			'464' 873 5 45281 84446 18265 22486 70333
4th/11th	1000/1010z	14580/16020	'276' 980 5 42997 84116 53718 78927 34694
18th/25th			'276' 438 5 61882 70252 56388 26088 89206
Thursday			
5th/12th	0730/0740	11530/14977	172' 405 6 30485 96632 52537 53317 06675 41736
19th/26th			172' 486 5 88728 34856 99271 37454 11876
5th/12th (E17z)	0800/0810z	16780/12850	'217' 438 5 21767 53672 11834 81022 36903
19th/26th			'217' 830 5 04537 87875 47152 23486 80331
5th/12th	0930/0940z	9255/10325	'698' 201 5 26634 14690 95590 63888 92060
19th/26th			'698' 273 5 90577 83175 42776 18193 18204
5th/12th	1200/1210z	13145/14535	175' 820 6 88554 82045 36717 24042 75956 31670°
19th/26th			175' 932 6 21015 82225 23414 73599 34332 53522
Friday			
6th/13th	0830/0840z	10290/9655	156 <sup>3</sup> 890 7 88620 58069 61732 74537 57440 10597
20th/27th			156' 824 7 44817 89106 37937 16393 56723 71382 94742
6th/13th	0900/0910z	6844/7161	'239' 406 5 46062 68672 97478 39685 30485
20th/27th			'239' 468 5 38865 17495 42551 32629 59658
Saturday			
7th	0800/0810z	12460/10250	132° 946 5 65806 66610 20336 17301 88554

#### S06 & S06s RUSSIAN from PoSW

### S06, OM Voice:-

# First + Third Fridays in the Month Schedule, $2000 + 2100\,\mathrm{UTC}$ in July, $1900 + 2000\,\mathrm{UTC}$ in August:-

2-July-21:- 2000 UTC, 9475 kHz, "768 768 768 00000", S8 to S9.

2100 UTC, 7561 kHz, peaking over S9.

16-July-21:- 2000 UTC, 9475 kHz, strong, "768 768 768 00000".

2100 UTC, 7561 kHz, weaker.

6-Aug-21:-1900 UTC, 9475 kHz, "768 768 768 00000", weak, interference from a strong broadcast station on 9480, probably would not have been a problem if S06 had stayed at 2000z as in July.

2000 UTC, 7561 kHz, much stronger, peaking over S9 with rapid up and down fading.

20-Aug-21:- Nothing heard at 1900 UTC on 9475, must have been a very weak signal although broadcast stations on neighbouring frequencies were strong enough.

2000 UTC, 7561 kHz, very weak signal, only just readable, "768 768 768 00000".

#### S06s, YL Voice:-

#### Monday 0900 + 0910 UTC Schedule, call "232":-

12-July-21:- 0900 UTC, 16380 kHz, DK/GC "480 480 5 5", S6 to S7, "26634 14690 95590 60386 03009".

0910 UTC, 14835 kHz, S6 with QSB.

19-July-21:- 0900 UTC, 16380 kHz, DK/GC "984 984 5 5", "52343 69628 42432 56075 65281", weak at first then became stronger.

0910 UTC, 14835 kHz, weak signal of some kind, way down in the noise, unable to confirm as the second sending.

23-Aug-21:- 0900 UTC, 16380 kHz, weak signal, sank into noise, second sending better:-

0910 UTC, 14835 kHz, DK/GC "846 846 5 5", "33696 13577 74526 46647 79302".

#### Tuesday 0730 + 0740 UTC Schedule, Call "427":-

13-July-21:- 0730 UTC, 7365 kHz, DK/GC "913 913 5 5", S6 with QSB, "88146 57856 98835 46186 16945".

0740 UTC, 11655 kHz, strong signal, a good S9.

3-Aug-21:- 0730 UTC, 7365 kHz, weak signal, sank into noise.

0740 UTC, 11655 kHz, much stronger, DK/GC "918 918 5 5", "88146 57856 98835 46186 16945".

17-Aug-21:- 0730 UTC, 7365 kHz, very weak, unreadable.

0740 UTC, 11655 kHz, stronger although only S5 at best, DK/GC "935 935 6 6", "61881 60151 56499 37086 11887 44066".

24-Aug-21:- 0730 UTC, 7365 kHz, unlike last time this was a strong signal, S9 with QSB, DK/GC "935 935 6 6" and 5Fs as on the 17th.

0740 UTC, 11655 kHz, very strong, S9+.

### Wednesday 1000 + 1010 UTC Schedule, Call "276":-

7-July-21:-1000 UTC, 14580 kHz, DK/GC "431 431 5 5", S5 with QSB, "77821 14869 62733 77538 48223".

1010 UTC, 16020 kHz, also around S6.

14-July-21:- 1000 UTC, 14580 kHz, "431 431 5 5" and 5Fs as on the 7th. Weak signal.

1010 UTC, 16020 kHz, weak, difficult copy.

28-July-21:- 1000 UTC, 14580 kHz, DK/GC "489 489 5 5", good signal, peaking around S8 with QSB, "43247 43380 48080 36478 38013".

1010 UTC, 16020 kHz, weaker.

11-Aug-21:- 1000 UTC, 14580 kHz, DK/GC "980 980 5 5", "42997 84116 53718 78927 34694", S7 with QSB.

1010 UTC, 16020 kHz, a couple of S-points weaker.

25-Aug-21:- 1000 UTC, 14580 kHz, DK/GC "438 438 5 5", S6 to S7, "61882 70252 56388

26088 89206".

1010 UTC, 16020 kHz, weak, started off at around S4, rapidly sank into noise and became unreadable.

#### Friday 0830 UTC + 0840 UTC Schedule, Call "156":-

23-July-21:- 0830 UTC, 10290 kHz, DK/GC "834 834 7 7", good signal, "23013 89758 52343 79628 42432 56075 56281".

0840 UTC, 9655 kHz, strong.

20 Aug-21:- 0830 UTC, 10290 kHz, DK/GC "824 824 7 7", strong signal, S9, unusual because for the past couple of Fridays this schedule has been

too weak to copy on both transmissions. "44817 89106 37937 16393 56723 71382 94742".

0840 UTC, 9655 kHz, also strong.

27-Aug-21:- In contrast with last week's transmissions nothing audible on either 10290 or 9655 this morning.

#### First Saturday in the Month 0800 + 0810 UTC Schedule, Call "132":-

3-July-21:- 0800 UTC, 12460 kHz, DK/GC "804 804 5 5", S7 with QSB, "68734 24316 57684 79734 23412".

0810 UTC, 10250 kHz, very weak, difficult copy.

# S11a log July/August

		<del></del>		
5149kH	z 0830z	10/07 [379/00] Konyetz 0833z S2	Malc, RNGB	SAT
	0830z	11/07 [371/00] Konyetz 0833z S3	Malc	SUN
	0830z	17/07 [371/38 0103752174] Konyetz 0842z S4 (Dutch SDR)	Malc, HfD	SAT
	0830z	18/07 [371/38 01037etc] repeat of Saturday	Malc	SUN
	0830z	25/07 [378/00] Konyetz 0833z S2	Malc	SUN
	0830z	31/07 [372/00] Konyetz 0833z S3	Malc, RNGB	SAT
	0830z	07/08 [377/00] Konyetz 0833z S3	Malc, RNGB	SAT
	0830z	08/08 [370/00] Konyetz 0833z S2	Malc, RNGB	SUN
	0830z	21/08 [370/33 36108 72421 12645 06364 45881 03214 42988 3728349393 48419]	RNGB	SAT
	00302	21/00 [370/33 30100 72421 12043 00304 43001 03214 42700 3720377373 40417]	KIVOD	5711
6814kH	z 0915z	02/07 [481/00] Konyetz 0918z S3	Malc, RNGB	FRI
001411	0915z	05/07 [486/00] Konyetz 0918z S3	Malc, RNGB	MON
	0915z	09/07 [481/00] Konyetz 0918z S3	Malc, KIVOD	FRI
	0915z	12/07 [484/00] Konyetz 0915z S2	Malc	MON
	0915z	19/07 [484/32 52759 to ??????	Malc	MON
	0915z	23/07 [484/32 5275996738] Konyetz 0926z S4	Malc	FRI
	0915z	· · · · · · · · · · · · · · · · · · ·	Malc	
		26/07 [485/00] Konyetz 0918z S2		MON
	0915z	30/07 [487/00] Konyetz 0918z S3	Malc, RNGB	FRI
	0915z	02/08 [487/00] Konyetz 0918z S2	Malc	MON
	0915z	06/08 [484/00] Konyetz 0918z S3	Malc, RNGB	FRI
	0915z	13/08 [483/36 5591141602] Konyetz 0926z S2	Malc	FRI
	0915z	16/08 [484/00] Konyetz 0918z S2	Malc	MON
	0915z	23/08 [486/00] Konyetz 0918z S3	Malc	MON
	0915z	27/08 [480/00] Konyetz 0918z S3	Malc	FRI
9339kH	z 0700z	01/06 [478/00]	RNGB, Malc	THU
	0700z	05/07 [475/33 03650 42184 86173 16821 04519 63656 3250516319 70606] Konyetz 0711z	RNGB, Malc	MON
	0700z	08/07 [475/33 03650etc] Repeat of Monday	Malc	THU
	0700z	12/07 [471/00] Out 0703z S3	Malc	MON
	0700z	15/07 [472/00] Out 0703z S4	Malc, RNGB	THU
	0700z	19/07 [472/00] Konyetz 0703z S3	Malc, RNGB	MON
	0700z	22/07 [479/00] Konyetz 0703z S5	Malc	THU
	0700z	26/07 [475/00] Konyetz 0703z S2	Malc	MON
	0700z	29/07 [478/00] Konyetz 0703z S4	Malc, RNGB	THU
	0700z	02/08 [477/00] Konyetz 0703z S3	Malc, RNGB	MON
	0700z	05/08 [476/00] Konyetz 0703z S2	Malc, RNGB	THU
	0700z	09/08 [470/00] Konyetz 0703z S3	Malc	MON
	0700z	12/08 [476/00] Konyetz 0703z S6	Malc	THU
	0700z	16/08 [475/00] Konyetz 0703z S3	Malc	MON
	0700z	19/08 [478/00]	RNGB	THU
	0700z	23/08 [475/39 90612 54461 08487 83441 05208 69412 32532 3073207694 20216]	RNGB, Malc	MON
	0700z	26/08 [475/39 90612etc] Repeat of Monday	Malc	THU
	07002	20/00 [1/3/3/ 70012etc] repeat of filohady	Marc	1110
10125k	Hz 1020z	02/07 [424/00] Konyetz 1023z S2	Malc, RNGB	FRI
10123K	1020z	06/07 [421/00] Konyetz 1023z S4	Malc, RNGB	TUE
	1020z	09/07 [426/00] Konyetz 1023z S3	Malc, KNOB	FRI
	1020z 1020z	13/07 [429/00] Konyetz 1023z S2	Malc	TUE
	1020z 1020z			FRI
	1020z 1020z	16/07 [422/00] Konyetz 1023z S4 (Dutch SDR) 20/07 [425/30 32708 77357 75167 74692 29022 00543 2846126668 30365] Konyetz 1030z	Male, RNGB	TUE
			RNGB, Malc	
	1020z	23/07 [425/30 32708etc] Repeat of Tuesday	Malc, RNGB	FRI
	1020z	27/07 [429/00] Konyetz 1023z S2	Malc	TUE
	1020z	30/07 [422/00] Konyetz 1023z S2	Malc, RNGB	FRI
	1020z	03/08 [426/31 5756429052] Konyetz 1031z S2	Malc	TUE
	1020z	06/08 [426/31 57564etc] Repeat of Tuesday	Malc	FRI
	1020z	10/08 [424/00] Konyetz 1023z S2	Malc	TUE
	1020z	13/08 [424/00] Konyetz 1023z S3	Malc	FRI
	1020z	17/08 [422/00] Konyetz 1023z S2	Malc	TUE
	1020z	24/08 [421/00] Konyetz 1023z S3	Malc	TUE
	1020z	27/08 [427/00] Konyetz 1023z S5	Malc	FRI
	1020z	31/08 [420/00] Konyetz 1023z S3	Malc	TUE
12457k	Hz 1850z	07/07 [288/00] Konyetz 1853z S7	Malc	WED
	1850z	10/07 [282/00] Konyetz 1853z S6	Malc	SAT
	1850z	17/07 [285/00] Konyetz 1853z S3	Malc	SAT
	1850z	21/07 [286/37 6355854056] Konyetz 1902z S6	Malc	WED
	1850z	24/07 [286/37 63558etc] Repeat of Wednesday	Malc	SAT
	1850z	28/07 [286/00] Konyetz 1853z S4	Malc	WED
	1850z	31/07 [286/00] Konyetz 1853z S3	Malc	SAT
	1850z	04/08 [282/00] Konyetz 1853z S3	Malc	WED

1850z	07/08 [288/00] Konyetz 1853z S2	Malc	SAT
1850z	11/08 [287/34 1954114950] Konyetz 1900z S2	Malc	WED
1850z	18/08 [288/00] Konyetz 1853z S3	Malc	WED
1850z	25/08 [287/00] Konyetz 1853z S9+10	Malc	WED
1850z	28/08 [285/00] Konyetz 1853z S3	Malc	SAT
13537kHz 0510z	19/07 [658/00]	HfD	MON
0510z	02/08 [652/00]	Ary	MON
15690kHz 0500z	24/08 [380/00]	HfD	TUE

# $\underline{\mathbf{V07}}$

Sunday

July 2021

July 202	July 2021							
0300z	13521kHz	0320z	12121kHz	0340z	11421kHz			
04/07	514 000				[0300z Japan SDR]	Weak [also H-FD via KiwiSDR USA]		
11/07	514 1 51	7 60 86104	17989 000 000		[0300z Japan SDR]	Weak		
68332 96991 73389 64159 14372 41223 81462 29378 25623 55218 40735 76447 49372 01087 56759 09814 36338 61243 84563 77536	1 2 59462 23708 19908 3 30422 22213 63758 9 73295 30980 43301 3 31780 67795 65097 4 41667 53290 23668 8 32054 98248 58540 9 91409 26568 23331 9 12736 81424 83004 4 61596 20576 42116 9 99521 35836 68148 5 21678 63174 80830 9 91435 08100 17989 Courtesy DanAR							
18/07	514 1 87	89 132 998	50 37547 000 000		[0300z Japan SDR]	Weak		
25323 3527i 35459 3549i 49247 7864i 11429 6215i 09747 8599i 02608 17944 94067 76690 79029 4139i 23555 65918 75757 7737i 80578 5245i 52426 6459i 16717 7505i 25166 1275i 67800 50111 64257 4083i 19479 4987i 36554 1284i 85278 3726i 59976 06744 01332 1917i 19961 7337i 07758 13724 686990 31776 68219 9707i 98645 37547i	3 72238 84353 79143 3 79944 30650 71583 3 04850 27995 74373 3 32259 13294 79219 9 76703 26258 73750 7 03597 60668 56366 7 8789 12292 55520 8 4658 78391 40011 3 18983 45005 83938 6 63042 59580 21412 5 55138 58823 14839 6 61772 42552 08493 1 86763 48342 00737 7 13576 15444 77547 6 65908 15117 27499 8 2481 32005 39288 8 05887 32498 12297 3 33354 49547 27169 8 10352 59323 25427 8 70942 94839 18359 1 13771 07648 79023 9 34687 21908 07180 1 13205 37453 67294 1 14509 60680 36883 1 08927 04632 68453 1 25659 38854 01853 7 0000 000 Courtesy DanAR	7.00.27011	22401.000.000		10200- Lavas (DD)	West		
25/07		7 80 37911	82401 000 000		[0300z Japan SDR]	Weak		
514 514 514 427 80 37911 01369	1 9 04994 23351 91487							

```
13464kHz
                                                           0320z
                                                                                12164kHz
                                                                                                                       0340z
0300z
                                                                                                                                            11564kHz
01/08
                                       415 1 300 95 89187 ... 78543 000 000
                                                                                                                                                               [0300z Japan SDR]
                                                                                                                                                                                                                                               Weak
415 415 415 1
300 95
89187 35658 18095 56552 10930
40763 01911 15573 70681 05782
43847 01032 26175 42785 28464
69381 40670 81661 32228 04805
88398 82718 68979 08008 38034
40773 63452 61956 91141 15357
78376 21432 80136 34363 26526
48124 42203 28406 74500 75228
71706 01522 67548 11033 21818
61080 50007 72761 81187 67433
38471 53193 26999 73109 25151
03980 78072 16421 19262 94149
37124 99254 89746 04255 41372
04896 57801 95833 14561 32332
56235 88405 49358 31448 26263
36099 08300 25928 44443 63101
61059 85461 87111 58519 42425
47821 90232 41884 64597 67726
08/08
                                       415 1 294 124 42104 ... 44429 000 000
                                                                                                                                                               [0300z Japan SDR]
                                                                                                                                                                                                                                               Weak, QSB2
415 415 415 1
294 124
42104 17259 14657 38521 76682
19830 31913 29370 86940 11156
86147 98724 92564 21761 65201
45232 73640 37887 71685 52101
59366 86989 91632 53507 85694
07748 23550 94358 56667 16329
70177 52989 78262 44267 56821
34219 71546 21883 17095 97040
54219 71340 21863 17093 97040
50695 11866 36872 70953 10819
01405 62083 94486 65341 55101
09310 71357 76859 37279 38670
83714 43107 67890 44636 12266
98077 50273 71424 57536 57083
79901 03372 21520 07370 39306
45981 01855 02086 56957 99444
77907 82400 08278 70359 86285
74906 99917 93845 39304 12617
47121 33151 29979 37902 56306
53328 86660 29131 39242 24295
02162 82646 62853 17676 67762
0130? 18117 70857 79571 83345
93880 24649 41967 53987 11431
04985 20814 86797 05882 85430
81882 63744 34686 55387 30288
Courtesy DanAR
15/08
                                       415 1 5617 108 30159 ... 30561 000 000
                                                                                                                                                               [0300z Japan SDR]
                                                                                                                                                                                                                                              Weak, QSB2
415 415 415 1
5617 108
30159 38994 70328 23236 35854
69103 60586 ?4045 98689 14981
36049 08570 26295 37712 68067
32748 96194 ?8038 06395 52252
36019 71979 16848 06315 97996
41416 46018 22584 12183 65600
66443 00601 87904 83057 66614
86497 53812 25604 04124 95788
20648 54234 48438 48952 29810
89203 80035 31238 01101 35211
40497 29394 04177 62391 77885
75176 64331 24361 75866 02736
27658 11937 75585 53401 98514
86579 44666 54337 45193 24689
61902 57027 45555 54642 97129
10825 62024 89159 61258 90628
18800 95490 83573 23823 97908
89395 28049 99164 61079 79824
71633 31636 09175 32909 08572
59484 06730 42216 81544 93849
2676? 86911 92960 36094 51457
75625 72737 30561 000 000
22/08
                                       415 1 6078 108 12990 ... 30112 000 000
                                                                                                                                                               [0300z Japan SDR]
                                                                                                                                                                                                                                               Weak, QSB2
415 415 415 1
6078 108
60/8 108
12990 89207 62684 04426 58851
32513 75709 00425 70679 68443
32157 32350 50569 28993 95229
72317 49299 44582 18014 14013
11082 74418 57691 96641 32200
59323 94796 50082 42879 16952
61515 23516 23534 84283 73893
15006 31284 30598 69335 75742
37843 91215 18320 37559 77935
43936 12486 15591 67669 58972
45456 07351 46797 49015 44967
13457 40315 95478 28627 32168
17453 47380 52002 81618 03320
```

11293 48146 77439 37089 37967 05362 63355 98563 04862 39175 17433 00302 68468 17822 70861 41898 87187 41604 28086 10564 19671 21286 38704 74127 11681 52251 41227 56197 94823 80814 98601 89289 36367 28853 27796 52401 85309 75008 10852 79889 63050 36572 30112 000 000 Courtesy DanAR

29/08 415 1 399 44 67332 ... 46709 000 000 [0300z Japan SDR] Weak, QSB1

# <u>V13</u>

# <u>V15</u>

North Korea Spy Numbers Broadcasting via Pyongyang BS

# **V24**

South Korean Intelligence.

# **V26**

4243kHz1233z	21/07/21 [(From M95 sked - USB - Chinese - Female - // 9054) (Remote tuner Taiwan)]	JPL	MON
4243kHz1158z	17/07/21 [(From M95 sked - USB - Chinese - Female - // 9054) (Remote tuner Taiwan)]	JPL	SAT
9054kHz1233z	21/07/21 [(From M95 sked - USB - Chinese - Female - // 4243) (Remote tuner Taiwan)]	JPL	MON
9054kHz1158z	17/07/21 [(From M95 sked - USB - Chinese - Female - // 4243) (Remote tuner Taiwan)]	JPL	SAT
9054kHz1208z	22/07/21 [(From M95 sked - USB - Chinese - Female - // 4243 N/H) (Remote tuner Hong Kong)]	JPL	FRI

# **Polytones**

# XPA1 c

Tuesday/Thursday

July 2021

0710z	10446kHz	0730z	11474kHz	0750z	12157kHz	
01/07	367 1	02892 00138	86621 26724		[0750z QRM5]	Weak
06/07	367 1	04201 00145	92828 55635			Weak OSB4, ORM2

04201 00145 92828 71229 02482 20237 66250 61441 30879 76771 29700 63992 01716 42224 40506 31250 58437 82527 20224 89655 77456 84975 67284 96577 07550 31260 52395 15278 29790 98531 18099 71138 77974 26225 53014 60545 05402 09374 48234 98913 71804 28244 22147 76408 30628 75393 40522 41046 49891 71779 60986 25330 03049 98662 75603 29872 65347 67562 78697 26796 96596 31542 98361 61818

29379 55347 55305 50132 01231 42260 18648 64756 51187 44925 15009 11527 69615 84516 53684 42860 04681 20550 12658 87487 34588 06746 72510 36361 55255 37678 88696 92762 39957 84669 05609 22419 47515 00897 59842 31786 36036 03380 25022 56711 64141 82904 69128 72496 20004 77146 58647 96970 51055 35480 50713 97723 22073 92317 66141 34423 16879 04483 49770 80570 77490 69302 42309 04024

 $39684\ 42733\ 57014\ 12088\ 27980\ 30527\ 98736\ 10537\ 40221\ 38186\\ 61391\ 84961\ 01536\ 72452\ 35217\ 44324\ 25182\ 93140\ 53454\ 55635$ Courtesy PLdn

08/07	367 1 04201 00145 92828 55635		Weak
13/07	367 000 07318 00001 00000 36660	[0750z Fair]	Weak
15/07	367 000 04713 00001 00000 36255	[0710, 0730z Unworkable]	Weak QSB3
20/07	367 1 01252 00135 73384 52123	[0710/0730z NRH]	Fair QSB3

367 367 367 1 367 367 367 1 367 367 367 1

01252 00135 73384 25157 06279 98641 11274 09232 80156 72072 21518 76491 89959 05959 57220 45280 83520 42313 78669 09321 49657 15030 04667 52756 08776 87252 74955 57991 42934 04182 42126 57277 73807 01745 73902 99559 11319 97913 38650 05895 44787 04285 74488 28252 08704 61731 79833 20290 88173 83372 17908 55424 46411 23179 71327 95988 97344 84871 02397 94330 70259 01759 68890 30173

25669 71707 04937 64249 54991 78414 43387 13189 29139 00813  $54036\ 19859\ 04756\ 39563\ 23691\ 45908\ 55952\ 15170\ 96451\ 16661$   $21589\ 48927\ 58705\ 85755\ 59281\ 80353\ 90316\ 34423\ 06608\ 09366$ 00216 31715 39593 34274 61239 16010 01061 09946 08245 43568 82533 23882 00966 84736 10160 40026 66480 52890 03688 47318 04520 02267 68576 18960 23492 60488 53569 53687 92873 41019 58385 06469 25356 67996

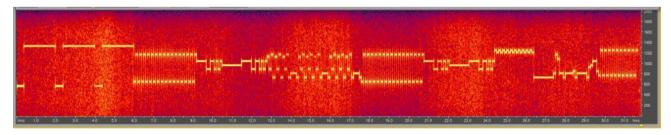
12913 77752 40647 11803 83893 79657 60956 51707 99395 52123

Courtesy PLdn

22/07	367 1 01252 00135 73384 52123	[0710/0730z Weak QSB3]	Fair QSB3
27/07	367 1 01252 00135 73384 52123	[0710/0730z Weak QSB3]	Fair
29/07	367 1 01252 00135 73384 52123	[0710/0730z Very weak QSB3]	Weak

### August 2021

0710z	10234kHz	0730z	11511kHz	0750z	12117kHz	
03/08	829 000 0	1140 00001	Rest unworkable:		[0710/0730z Unworkable]	Weak, QSB3/4
05/08	829 000 0	1202 00001	00000 33251		[0710z Unworkable]	Weak
10/08	829 000 0	4186 00001	00000 34664		[0710z QSB4 0730z Unworkable]	Weak



12117kHz0750z 12/08/2021 [Illustrates Null Message]

12/08	829 000 09700 00001 00000 34661	[0750z Strong]	Weak
17/08	829 000 08497 00001 00000 36671	[0750z Strong]	Weak QRM3
19/08	829 000 07692 00001 00000 35270	0710z Fair, 0730z Weak QRM2	, 0750z Strong
24/08	829 000 01610 00001 00000 34252	[0750z Fair]	Weak
26/08	829 000 05031 00001 00000 31660	[0710/0730z QRM3]	Fair
31/08	829 000 06257 00001 00000 35663		Fair, QRM3

# XPA1 Wed/Fri

### Wed/Fri

July 2021

1210z	13368kHz	1230z	12168kHz	1250z	11168kHz				
02/07	02790	00124 09536	31737			[Via Twente]		Very strong, Strong	ng and Fair
311 311 311	1 1 311 311 311 1 311 311	311 1							
94204 3082 96226 5319 76052 9223 84890 3223 20103 9282	44 09536 03514 79862 800 99 18992 39588 00498 722 12 99841 96997 35786 431 14 15611 27625 62970 266 33 38581 76648 93703 209 15 12413 64113 80835 538 10 24061 60069	69 65006 06339 53 04 51622 07284 59 70 22443 42587 36 49 93516 94711 9	5543 88444 9029 36427 6653 77626 7404 17853						
81312 7604 97933 9586 31131 7880 13238 6336	0 93170 60369 99206 337 8 84879 62714 50806 872 61 23141 08460 63401 818 11 49565 44183 07060 961 12 35906 26417 38499 668 6 09235 46012 12873 667 11 31737	77 70779 50618 44 97 88205 69959 76 75 54436 17880 1 35 92715 12453 18 75 15993 60353 46	5410 03175 5752 92238 1007 50800 8578 39651						
07/07	Sched	ule Missed							
09/07	311 1	00564 00107	42626 16011			[1210z Fair]		Weak	
311 311 311	1 1 311 311 311 1 311 311	311 1							
99912 5898 78217 2288 10880 6917 26498 9188 17309 3499	77 42626 38662 81702 287 18 83313 28630 17961 463 13 93053 15919 44049 008 16 85842 34748 57055 783 11 94343 04746 94146 755 11 08391 98941 42501 196 12 60703 83909	30 24573 32225 54 49 86347 72069 29 85 16081 68015 70 84 43314 17638 69	4191 95594 9865 69462 0428 71355 3500 00945						
80560 3131 30720 3044 66858 8379	0 84420 95745 96616 683 4 41412 66745 59085 835 6 36373 93436 38244 816 5 93825 89244 85530 282 0 77301 30790 61392 160	08 00420 97654 94 48 38397 55050 8 64 44133 46446 0	1588 44755 1574 71565						
14/07	311 1 (	00564 00107 420	526 16011	[1220z Qs	SB3, 1250z Unv	vorkable]	Weak		
16/07	311 1 (	00564 00107 420	526 16011	[1220z QS	SB4, 1250z NRI	H]	Strong		
21/07	311 00	0 08561 00001	00000 34266	[1230z W	eak, 1250z NRI	· I	Strong		
23/07	NOT I	MONITOREI	)						
28/07	311 1	01231 00107	87262 53047		[1250z NR	H]		Weak QSB3	
30/07	311 1	01231 00107	87262 53047		[1250z Unv	workable]		1210z Fair QSB2	1230z Weak
August 2	2021								
1210z	13491kHz	1230z	12191kHz	1250z	10691kHz	[kindly fr	om Ary, thai	nks]	
04/08	416 00	0 04521 00001	00000 34256					Ary	WED
06/08	416 00	0 04556 00001	00000 36661				Weak		
11/08	416 00	0 05010 00001	00000 31256	[1250z Ur	nworkable]		Fair, QRM2	2	
13/08	416 00	0 06342 00001	00000 33662	[1250z W	eak]		Fair, QRM2	2	
18/08	416 00	0 02201 00001	00000 32652	[1250z Ur	nworkable]		Fair, QRM2	2	
20/08	416 00	0 04019 00001	00000 35655	[1250z Ur	nworkable]	1210z Fai	r, 1230z Weal	ζ.	
25/08	41610	00204 00100 70	367 73513	[1210z Str	rong]		Weak		
416 416 416	6 1 416 416 416 1 416 416	416 1							
05054 9077. 90882 4584 16881 5242 73322 0928 65120 3501	0 70867 92149 46927 847 5 06513 03462 86035 102 8 04504 63531 67051 531 66 49069 76910 96670 473 22 60344 15556 15119 479 9 27982 74667 71979 817 99 44754 39310	13 20708 90792 13 66 00767 45003 14 42 63601 45963 1 17 57933 47380 9	5569 45110 4801 24362 1262 75912 7787 82548						
06487 6439 03501 1714	16 90099 49282 04893 710 16 57703 43646 92729 093 14 67646 43419 14235 565 17 81000 63478 23145 882	49 06314 96228 35 52 55982 17631 92 64 95801 84181 73	5246 79224 2602 74153						
27/08	416 1		70867 73513			[1210z Fair, QSB3]		Weak	

# XPA2 m

#### Sunday/Tuesday

July 2021

#### 09728 00156 69196 ... 12443

09728 00156 69196 76337 57197 04318 07154 27014 64196 92260 84325 86054 80822 86055 98068 57593 39633 03269 15531 09194 17429 34707 38385 46701 42558 49135 07164 12446 77377 21248 53969 68098 00219 15473 50904 83776 47227 37286 85420 92567 92291 74633 36529 07411 37746 31142 41399 15194 27479 53038 94863 53585 34600 04755 28895 46899 01559 31716 54508 85707 47987 67514 74941 77645 48619 48523 69140 14583 95802 45483 37417 59863 62210 38680 08096 16542 32941 94101 42289 51621 27964 41061 82152 81446 72765 55478 29902 90411 52893 60983 16749 79870 13019 16012 02691 38209 82749 72491 79069 94845 00285 67149 32783 89296 16721 95515 96508 99351 12269 15832 20296 66242 56333 03787 15332 55301 15643 44090 35003 63914 77829 37273 90581 26768 76466 69330 36188 59116 51196 87804 45661 02754 08284 65987 11301 79069 92869 33731 83243 06384 71500 39142 32230 70655 87876 62514 97251 79303 63139 46958 30899 47057 91289 23940 55933 23652 65627 76060 12443 Courtesy PLdn

#### August 2021

27/07

2100z	12159kHz	2120z	11559kHz	2140z	10559kHz		
01/08		09728 00156 69196	12443		[2100z QSB3, Rest QRM2]	Fair	
03/08	1	02752 00144 45532	51071			Fair	
10/08		03814 00132 35317	66236		[2100z fair]	Strong QRM2	
61009 70394 73355 32875 95671 00522 87420 65735 66545 81786 13713 56913 67292 26343 29024 84757 26393 75631 17579 58933 96673 56171 60090 37590	4 63193 01683 51 5 72620 95608 72 2 90619 60355 2 9 34097 78169 46 0 36526 85490 15 3 06447 87435 34 3 50327 22194 72 7 18301 57081 9 1 38343 21193 2 6 3 21507 74489 26 1 38108 43991 13	375 47322 91814 48109 66 160 80456 08898 76760 77 331 50532 54111 74105 95 211 80145 05255 46276 93 240 46328 10683 18554 52 484 42976 25907 61381 81 021 25723 26971 38617 12 959 89478 02786 63492 05 555 03049 19064 00720 66 522 75545 85230 18051 86 050780 60849 75794 25 862 83398 97986 66945 52 713 27653 96709 49219 83 236	7546 23070 1120 37343 1287 94325 3376 97639 1036 42598 2364 76097 1623 36162 1104 59046 1020 48917 3779 02136 1097 35021				
15/08		03814 00132 35317	66236			Strong	
17/08		07578 00106 30115	41646			Very strong	
97199 98595 81979 39739 49041 01845 15971 18879 52839 65829 44565 26245 48350 7268 79457 28376 19116 73571	5 26500 39115 18 9 89634 91556 75 5 74544 07581 41 9 80531 45537 02 9 93717 75162 75 5 31867 15225 24 3 09717 63270 25 6 75635 34885 45 1 31153 52776 93	535 56363 90388 94874 45 893 18428 91583 69339 22 770 78624 46154 44461 65 278 02741 08471 61609 78 521 50252 29608 00958 63 876 32133 89223 18442 58 074 48650 11635 34027 59 068 43115 96159 94236 65 859 95787 17221 82871 35 179 34284 58299 21328 16 548 75167 54783 20942 41 Cou	2436 60040 8889 96674 9911 88065 1247 31607 13779 37333 1200 14744 1380 58531 1212 07599 16847 61334				
22/08		07578 00106 30115	41646			Very strong	
24/08		01005 00001 00000	33651		[2100z Strong]	Very strong	
25/08		00100 00168 63435	27632		[1240z strong]	Very strong	
20756 8333: 39651 9140: 69116 5086: 88445 3499( 89947 8770: 60855 3712( 27100 78608 21939 4112: 0188 3755: 93636 00612 07293 6915: 48569 62292 74154 5094;	9 51707 76818 18 5 26295 30913 22 5 24506 83715 84 0 66359 19973 83 2 14068 41697 20 0 36512 54235 71 2 31142 03009 96 3 53134 36942 43 6 67487 00816 89 5 66936 44402 72 7 81554 21614 97 0 01874 38476 06	363 71776 59766 39971 34 943 86556 76192 36971 65 145 85689 80560 33851 86 553 39648 36154 47219 92 788 43580 65616 33457 10 970 07312 52254 36785 64 849 34549 56240 39841 76 764 35576 92924 69343 94 818 98344 52219 65980 01 431 78329 36225 50743 91 504 31158 35067 35392 13 736 55381 93139 23537 65 567 80682 33946 28674 91 980 49107 08994 96807 65 996 32308 65723 03866 52 773 39090 52392 33019 37 986 02022 10077 06025 08 Cou	1872 70625 0044 31968 1240 73208 1308 86599 1992 14037 13391 76847 1632 60084 1296 03095 485 79199 1635 82188 15773 67530 1960 31419 1508 10324 12848 43303 1958 12278				
29/08		06124 00001 00000	33660			Very strong	
31/08		04407 00086 13791	03035			Weak QSB3	Poor condx

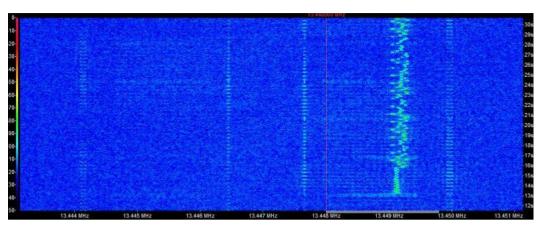
Very strong

# XPA2 p

#### Monday/Wednesday

July 2021

0700z 12148kHz 0720z 13448kHz 0740z 13948kHz



#### 13448kHz 0720z 05/07 straddled by wide signal

05/07	00352 00210 69080 05174	[0700z Strong]	Very strong

07/07	00352 00210 69080 05174	[0700z Strong]	Very strong
12/07	00352 00210 69080 05174	[0740z Very strong]	Strong
14/07	00352 00210 69080 05174	[0700z NRH]	Weak QSB3
19/07	00352 00210 69080 05174	[0700z Fair]	Strong
21/07	00352 00210 69080 05174		Very strong
26/07	08234 00001 00000 34263	[0700z Strong]	Very strong
26/07	05987 00001 00000 41265	[0740z Weak QSB2]	Strong

### August 2021

0700z	12152kHz	0720z	13552kHz	0740z	13952kHz	
02/08	00565 00	0100 20279	23642		[0700z MISSED]	0720z Strong 0740z Fair QSB3
04/08	00565 00	0100 20279	16602		[0700z Fair]	Strong
28228 69754 67675 5198: 34515 6033 35287 8403: 58209 7476 62831 2905: 56057 48578 07200 20392	0 20279 68947 49673 23419 4 05048 79831 59544 07781 2 43526 77563 95160 35723 1 98513 98575 21246 05524 2 13340 09345 87456 21778 1 74349 56646 12778 76607 2 57690 19059 21017 10581 8 31784 43709 09740 16954 2 63034 90977 86894 06797 6 98126 83489 07745 04161 8 23642	48842 50916 88 71177 49059 39 32980 56456 35 53227 56525 44 35966 80772 94 61564 72224 53 43241 21091 57 64314 07792 34	958 80390 903 46767 467 84976 561 93445 755 3751 859 87134 980 08084 863 32387 548 21295			

11/08	00565 00100 20279 23642		Weak
16/08	00565 00100 20279 23642	0700z Unworkable 0720z Weak,	QSB3/4 0740z Fair
18/08	00565 00100 20279 23642		Weak
23/08	06247 00001 00000 35662	[0700z Weak, QSB3]	Strong
25/08	08337 00001 00000 36263	[0740z QRM3]	Weak
30/08	08337 00001 00000 36263 Last group previously used 25/08		Fair, QRM3

# XPA2 Wed/Fri

July 2021

July 202	1						
Wed/Fri							
2100z	12124kHz	2120z	11124kHz	2140z	10624kHz		
07/07	05489	00086 70254	46076				Very strong
09845 5050 83774 7327 70886 53626 52331 4880 36315 7630 92878 2529 50515 3433	6 70254 90491 18920 2797 1 23296 05915 35571 8992 7 61098 10619 65179 8965 6 89113 42877 05863 068: 5 95438 15362 25198 7178 2 31144 40481 42479 3965 3 20594 58645 48010 3717 3 57147 77690 82733 9486 3 39723 50915 07876 2515	20 50027 49871 39 54 81124 72070 64 82 58452 68309 65 89 23356 25507 36 88 18518 72570 58 75 65550 02206 15 57 94265 78549 66 52 01666 79333 46	993 39641 232 18249 417 29047 058 46358 734 03538 786 13810 193 13294				
10/07	05489	00086 70254	46076			[2100z Strong]	Very strong
14/07	00748	00096 38257	55633			2100z Very strong	, 2120z Fair, 2140z Unworkable
83418 4084: 33338 52719 08199 31640 83506 98980 93158 18719 15910 44410 01586 1910: 62539 05580	6 38257 57709 55290 8382 2 43265 25237 43116 9987 9 69363 80798 60797 6675 0 85072 35587 18063 4684 0 60876 47961 71783 2994 9 03028 45745 44428 8564 0 24765 21966 55458 3454 3 26643 24509 21277 1875 0 76236 04621 35303 0634 4 07524 33530 03632 5016	79 35317 11271 08 89 24094 36159 83 14 29713 76589 02 13 87027 63719 35 13 05535 27421 95 14 08037 32814 99 16 38435 74332 69 17 29637 57347 75 18 16814 74536 55	694 38913 510 55552 387 23810 978 84488 820 76261 893 38768 975 59382 690 92806				
16/07	00748	00096 38257	55633				Very strong
21/07	06377	00102 66535	66561		[2100z	Fair, QSB3]	Very strong
23/07	NOT N	MONITORED					
28/07	00386	00128 46661	06073				Very strong
54072 7078: 73407 0349; 07878 4639; 42469 2986; 96303 9612; 38417 6044; 96513 4893; 44284 2997; 67601 5332; 14266 8599; 77372 8825; 94602 8680; 06073	8 46661 44033 89433 8095 3 14904 27815 57726 4534 4 38715 42327 89732 1395 5 13661 55655 43305 2225 8 33058 65484 89050 7103 6 91036 20314 06463 0915 9 38656 57134 90711 7295 4 37380 80855 62499 5712 1 31707 04413 98255 8508 1 82196 35568 59114 0395 7 87190 62250 41596 1884 6 17071 63089 83565 9115 2 26756 29994 00702 7403	15 18284 88917 29 15 75769 26184 57 77 00486 96399 53 82 35344 48967 25 77 13171 39614 15 16 70963 22197 49 20 68562 65803 49 85 89091 97494 55 82 27713 81649 64 14 58838 23014 60 90 58604 20825 72 84 83251 45519 97 Cour	899 44640 698 25282 393 07229 289 83137 474 09259 862 72692 687 15463 655 74155 916 47210 222 94590 584 48908 732 47804 tesy PLdn				
30/07	00386	00128 46661	06073		[2100z	Very strong]	Strong

### August 2021

13919kHz 14719kHz 1200z 1220z 1240z 16219kHz 04/08 00165 00144 70258 ... 16602 [1240z Fair] Very strong  $00165\ 00144\ 70258\ 08394\ 45584\ 68387\ 43212\ 67565\ 18044\ 98873\\ 68119\ 86453\ 73002\ 67964\ 40414\ 11352\ 50849\ 50340\ 10409\ 05713$  $\frac{29066}{73094} \frac{78602}{78602} \frac{60449}{60449} \frac{33937}{3937} \frac{06258}{60258} \frac{15217}{6228} \frac{15784}{6258} \frac{21496}{6258} \frac{15469}{6258} \frac{15217}{6228} \frac{15784}{6258} \frac{21496}{6258} \frac{15217}{6228} \frac{15784}{6258} \frac{11496}{6258} \frac{15784}{6258} \frac{11496}{6258} \frac{15784}{6258} \frac{11496}{6258} \frac{11496}{6258}$  $20907\ 62231\ 67521\ 81050\ 70163\ 98619\ 92516\ 61390\ 27639\ 00535\\ 59209\ 70513\ 75721\ 69050\ 60225\ 21440\ 13706\ 35289\ 90320\ 90654$ 00901 24371 14217 68242 50640 96123 30955 95240 20751 17170 42437 55041 30094 93158 55976 53545 89109 62000 52326 66689 36709 32298 33693 94454 30400 91694 03937 74198 69013 30956 46988 82772 21001 15206 60552 76536 20044 50694 66508 89166 09605 89965 00111 00366 49001 92934 10700 07524 72655 20707 39293 71790 66649 00436 59626 71447 16602 Courtesy PLdn 00165 00144 70258 ... 16602 06/08 [1220z Strong] Fair 11/08 00233 00080 25367 ... 62055 [1240z Weak] Strong 00233 00080 25367 04670 41631 62201 79333 52359 17460 55322 15080 72830 01675 64228 04382 40467 03023 48218 64405 49293 43379 29629 93695 79103 01482 09631 02107 67644 94406 26985 50775 30466 63235 87239 00285 29821 16211 24743 81866 86118 96081 71272 10538 93886 20890 96912 37198 24037 16179 84524 30220 05677 89032 93742 11985 77943 69417 63948 85623 20171 09681 28761 97693 41590 58183 08777 23703 98590 75363 62758 12585 09257 83371 54140 25769 54685 21604 53950 97017 02920 64010 42703 62055 13/08 00233 00080 25367 ... 62055 [1240z Strong ORM3] Very strong 18/08  $00637\ 00108\ 94465\ ...\ 20336$ [1240z Unworkable] 1220z Fair QRM3 1200z very strong 20/08 00637 00108 94465 ... 20336 Very strong 00637 00108 94465 42035 74970 23923 62319 56967 32550 54439 49208 27298 58736 67904 09381 93689 93510 16099 89724 21207 28875 83506 91524 44441 05498 86491 61412 26459 48210 30845 54804 49041 34763 57270 64982 97974 92931 55658 42272 88700 44140 25094 67079 94571 77211 82622 05738 13774 13697 19518  $\frac{62663}{51739} \frac{51739}{73811} \frac{61042}{61042} \frac{40007}{40107} \frac{44139}{4139} \frac{98911}{65908} \frac{65908}{68421} \frac{68916}{68421} \frac{68916}{6842$  $\frac{64585}{27497} \frac{63487}{63487} \frac{39733}{39733} \frac{83352}{77702} \frac{26972}{26972} \frac{16959}{16959} \frac{40626}{40626} \frac{57939}{40626} \frac{40626}{67088} \frac{15454}{63788} \frac{39235}{16959} \frac{30664}{169629} \frac{16959}{16959} \frac{16959}{16$ 33921 62632 00310 04846 84125 70730 50214 04835 79852 06125 23968 77890 66150 66762 52360 36686 32993 92276 59487 14158 20336 Courtesy PLdn 06957 00001 00000 ... 41263 27/08 Very strong Other XPA2

Monday:

12158kHz1200z 19/07 04124 00150 46527 ... 13516 No other transmissions found MON Ary

04124 00150 46527 13931 21288 41809 87774 30681 13476 25326 85294 70361 75694 79773 07020 86425 98641 24737 37974 57438 37585 05096 06001 89181 21400 38284 02132 13890 74877 76865  $\frac{56616}{13472} \, 22245 \, 85789 \, 51274 \, 83633 \, 69629 \, 45970 \, 78068 \, 42318 \\ 29960 \, 43878 \, 86135 \, 36950 \, 25981 \, 70599 \, 60541 \, 69924 \, 06292 \, 06715$  $82706\,69152\,47971\,71619\,37610\,53050\,03431\,32485\,67390\,26474\\89521\,15600\,39542\,03668\,57862\,53617\,88311\,18220\,76371\,72979$ 90798 10896 78532 46421 21360 94145 34927 71420 09262 80957 17666 86089 69342 39354 21120 28742 84673 57259 01533 06739 87314 96353 99660 12616 57763 15889 61453 11524 94610 15921 89663 19773 37557 74029 07467 11651 66661 75712 13781 28042 74620 05992 93167 71830 26908 70554 20134 29351 15892 72014 10640 04643 09449 92824 77228 78080 59413 24734 73921 20493 53866 37362 24738 14307 45477 47015 63155 10749 40001 25639 87318 99081 66206 83277 16813 44465 91717 90965 29933 77943 82868 18174 13516 Courtesy Ary

### From H-FD

Mon 05.07.2021 1500Z 13954 msg Mon 05.07.2021 1520Z 12154 msg Mon 05.07.2021 1540Z 11454 msg

Wed 07.07.2021 0910Z 16296 msg

Wed 07.07.2021 0930Z 14981 msg Wed 07.07.2021 0950Z 13953 msg

Thu 01.07.2021 0910Z 13445 msg Thu 01.07.2021 0930Z 12145 msg Thu 01.07.2021 0950Z 11545 msg

```
Thu 01.07.2021\ 1100Z\ 17435\ msg Thu 01.07.2021\ 1120Z\ 16235\ msg Thu 01.07.2021\ 1140Z\ 14935\ msg
```

Thu 01.07.2021 1600Z 13538 msg Thu 01.07.2021 1620Z 14438 msg Thu 01.07.2021 1640Z 14938 msg

Fri 09.07.2021 1100Z 14958 msg Fri 09.07.2021 1120Z 13958 msg Fri 09.07.2021 1140Z 12158 msg

Fri 02.07.2021 2100Z 12124 msg Fri 02.07.2021 2120Z 11124 msg Fri 02.07.2021 2140Z 10624 msg

#### 10427 03-08-2021 1045 XPA2 MFSK-16/20Bd

### 1B XPA2 From H-FD

73495 70424 46571 Courtesy Ary

Mon 02.08.2021 1500Z 13825 msg Mon 02.08.2021 1520Z 12125 msg Mon 02.08.2021 1540Z 11025 msg

01576 78068 19506 05323 60413 26712 73761 82303 09860 65653 79662 06334 00940 71988 81292 72716 70284 76031 18062 99362 45774 66735 78267 08192 10676 01672 78181 13538 19773 25391 18431 49904 40918 87445 72711 13833 58650 84867 23594 09594 50834 91229 00568 54419 48773 37771 28898 40200 71677 17808 54400 62100 23507 12684 51401 22092 58785 74881 18198 46595 91063 40488 32185 36650 73862 69417 57133 47151 60908 76345 79998 52436 46202 50850 73812 69417 57133 47151 60908 76345 79998 52436 46202 50850 55143 73772 96969 68157 13786 07972 88849 28460 15607 76506 79378 27272 04954 17577 73546 66618 41814 95067 55630 65165 00838 33811 51197 86804 56992 27139 15058 32431 66941 33752 07010 31816 61420 90504 52598 87488 89519 35855 24264 42742 38716 72031 66037 65226 32052 19843 69054 02451 15549 53898 89478 08195 74594 66587 31714 87567 81865 75273 21554 70592 88024 71392 32516 6587 31714 87567 58166 75273 21554 70592 88024 71392 32516 6587 31714 87567 58168 575273 21554 70592 88024 71392 32516 6587 31714 87567 581638 01617 51970 95337 21121 40562 04651 16236 58661 94945

Wed 04.08.2021 0910Z 18059 msg Wed 04.08.2021 0930Z 16093 msg Wed 04.08.2021 0950Z 14874 msg

Wed 04.08.2021 1100Z 16264 msg Wed 04.08.2021 1120Z 15864 msg Wed 04.08.2021 1140Z 14864 msg

Thu 05.08.2021 0910Z 14372 msg Thu 05.08.2021 0930Z 13372 msg Thu 05.08.2021 0950Z 12172 msg

Tue 17.08.2021 1600Z 14864 msg Tue 17.08.2021 1620Z 14364 msg Tue 17.08.2021 1640Z 13464 msg Ary

TUE

Tue 24.08.2021 1100Z 13887 msg Tue 24.08.2021 1120Z 12187 msg Tue 24.08.2021 1140Z 10387 msg

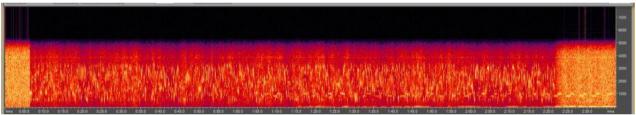
Tue 24.08.2021 1600Z 14864 msg Tue 24.08.2021 1620Z 14364 msg Tue 24.08.2021 1640Z 13464 msg

# XPB1

### July 2021

### SUN/TUE

14644kHz 1900z	04/07	Fair	2m15s			PLdn	SUN
13644kHz 1910z	04/07	NRH				PLdn	SUN
12144kHz 1920z	04/07	Weak	2m15s	QRM3		PLdn	SUN
11044kHz 1930z	04/07	Weak	2m15s			PLdn	SUN
10344kHz 1940z	04/07	Weak	2m15s			PLdn	SUN
9244kHz 1950z	04/07	Strong	2m15s			PLdn	SUN
14644kHz 1900z	06/07	NRH				PLdn	TUE
13644kHz 1910z	06/07	Very wea	ak			PLdn	TUE
12144kHz 1920z	06/07	Very we	ak			PLdn	TUE
11044kHz 1930z	06/07	Very we	ak			PLdn	TUE
10344kHz 1940z	06/07	Very we	ak			PLdn	TUE
9244kHz 1950z	06/07	Weak	2m15s			PLdn	TUE
14644kHz 1900z	11/07	Strong	2m15s			PLdn	SUN
13644kHz 1910z	11/07	NRH				PLdn	SUN
12144kHz 1920z	11/07	Strong	2m15s			PLdn	SUN
11044kHz 1930z	11/07	Strong	2m15s			PLdn	SUN
10344kHz 1940z	11/07	Strong	2m15s			PLdn	SUN
9244kHz 1950z	11/07	Strong	2m15s	843/1031Hz tones heard 1m05s into transmission	[See below]	PLdn	SUN
		_					



tores 0.05.0 0:10.0	0:15.0 0:20.0 0:25	0 0300 0350	0.40.0 0.45.0 0.50.0 0.55.0 1.50.0	1:05.6 1:10.0 1:15.0	12000 1230 1300 1335 1400 1450 1500 1550 2000 2	05.0 2:10.0 2:15.0 2:20.0 2:25.0 2:30.0 hrea	
			9244kHz1950z	11/07/2021	After 1m05s 843/1031Hz tones visible		
14644kHz 1900z	13/07	Fair	2m15s			PLdn	TUE
13644kHz 1910z	13/07	NRH				PLdn	TUE
12144kHz 1920z	13/07	Weak	2m15s			PLdn	TUE
11044kHz 1930z	13/07	Weak	2m15s			PLdn	TUE
10344kHz 1940z	13/07	Weak	2m15s			PLdn	TUE
9244kHz 1950z	13/07	Weak	2m15s			PLdn	TUE
14644kHz 1900z	18/07	Weak	2m15s			PLdn	SUN
13644kHz 1910z	18/07	NRH				PLdn	SUN
12144kHz 1920z	18/07	Fair	2m15s			PLdn	SUN
11044kHz 1930z	18/07	Weak	2m15s			PLdn	SUN
10344kHz 1940z	18/07	Weak	2m15s			PLdn	SUN
9244kHz 1950z	18/07	Weak	2m15s			PLdn	SUN
14644kHz 1900z	20/07	Strong	2m15s			PLdn	TUE
13644kHz 1910z	20/07	NRH				PLdn	TUE
12144kHz 1920z	20/07	Weak	2m15s			PLdn	TUE
11044kHz 1930z	20/07	Weak	2m15s			PLdn	TUE
10344kHz 1940z	20/07	V. strong	2m15s			PLdn	TUE
9244kHz 1950z	20/07	V.strong	2m15s			PLdn	TUE
25/07	NOT MC	ONITORED				PLdn	SUN
14644kHz 1900z	27/07	Fair	4m28s			PLdn	TUE
13644kHz 1910z	27/07	NRH				PLdn	TUE
12144kHz 1920z	27/07	Strong	4m28s			PLdn	TUE
11044kHz 1930z	27/07	Weak	4m28s			PLdn	TUE
10344kHz 1940z	27/07	Weak	4m28s			PLdn	TUE
9244kHz 1950z	27/07	Fair	4m28s QRM3			PLdn	TUE

### August 2021

### SUN/TUE

14918kHz 1900z	01/08	Wools	m28s	PLdn	SUN
		Weak			
13918kHz 1910z	01/08	Weak	m28s	PLdn	SUN
12218kHz 1920z	01/08	Weak	m28s	PLdn	SUN
11118kHz 1930z	01/08	Weak	m28s	PLdn	SUN
10218kHz 1940z	01/08	Weak	m28s	PLdn	SUN
9118kHz 1950z	01/08	Weak	m28s	PLdn	SUN
, ,	0 - 1 0 0				
14918kHz 1900z	03/08	Strong	m40s	PLdn	TUE
13918kHz 1910z	03/08	Strong	m40s	PLdn	TUE
12218kHz 1920z	03/08	Strong	m40s	PLdn	TUE
11118kHz 1930z	03/08	Fair	m40s	PLdn	TUE
10218kHz 1940z	03/08	Fair	m40s	PLdn	TUE
9118kHz 1950z	03/08	Fair	m40s	PLdn	TUE
14918kHz 1900z	08/08	Weak	m40s	PLdn	SUN
13918kHz 1910z	08/08	Weak	m40s	PLdn	SUN
12218kHz 1920z	08/08	Weak	m40s	PLdn	SUN
11118kHz 1930z	08/08	NRH		PLdn	SUN
10218kHz 1940z	08/08	NRH		PLdn	SUN
			40		
9118kHz 1950z	08/08	Weak	m40s	PLdn	SUN
14010111 1000	10/00	C.	40	DT 1	
14918kHz 1900z	10/08	Strong	m40s	PLdn	TUE
13918kHz 1910z	10/08	V.strong	m40s	PLdn	TUE
		_			
12218kHz 1920z	10/08	V.strong	m40s	PLdn	TUE
11119kHz 1020z	10/08	V.strong		PLdn	TUE
11118kHz 1930z			m40s		
10218kHz 1940z	10/08	V.strong	m40s	PLdn	TUE
9118kHz 1950z	10/08	V.strong	m40s	PLdn	TUE
140101-11- 1000-	15/00	17 -4	40-	DI 4	CLINI
14918kHz 1900z	15/08	V.strong	m40s	PLdn	SUN
13918kHz 1910z	15/08	V.strong	m40s	PLdn	SUN
		_			
12218kHz 1920z	15/08	V.strong	m40s	PLdn	SUN
11118kHz 1930z	15/08	V.strong	m40s	PLdn	SUN
		_			
10218kHz 1940z	15/08	Strong	m40s QRM3	PLdn	SUN
01191/Uz 1050z	15/08	Fair	40 ODM2	PLdn	SUN
			made drag		5011
9118kHz 1950z	10,00		m40s QRM3		
9110KHZ 1930Z	10,00		m40s QRM3		
					THE
14918kHz 1900z	17/08	Fair	m28s	PLdn	TUE
14918kHz 1900z	17/08	Fair	m28s	PLdn	
14918kHz 1900z 13918kHz 1910z	17/08 17/08	Fair Fair	m28s m28s	PLdn PLdn	TUE
14918kHz 1900z	17/08	Fair	m28s	PLdn PLdn PLdn	TUE TUE
14918kHz 1900z 13918kHz 1910z 12218kHz 1920z	17/08 17/08 17/08	Fair Fair Fair	m28s m28s m28s	PLdn PLdn PLdn	TUE TUE
14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z	17/08 17/08 17/08 17/08	Fair Fair Fair Fair	m28s m28s m28s m28s	PLdn PLdn PLdn PLdn	TUE TUE TUE
14918kHz 1900z 13918kHz 1910z 12218kHz 1920z	17/08 17/08 17/08	Fair Fair Fair	m28s m28s m28s	PLdn PLdn PLdn	TUE TUE TUE TUE
14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z	17/08 17/08 17/08 17/08 17/08	Fair Fair Fair Fair Weak	m28s m28s m28s m28s m28s	PLdn PLdn PLdn PLdn PLdn PLdn	TUE TUE TUE TUE
14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z	17/08 17/08 17/08 17/08	Fair Fair Fair Fair	m28s m28s m28s m28s	PLdn PLdn PLdn PLdn	TUE TUE TUE
14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z	17/08 17/08 17/08 17/08 17/08	Fair Fair Fair Fair Weak	m28s m28s m28s m28s m28s	PLdn PLdn PLdn PLdn PLdn PLdn	TUE TUE TUE TUE
14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z	17/08 17/08 17/08 17/08 17/08 17/08	Fair Fair Fair Fair Weak Weak	m28s m28s m28s m28s m28s m28s	PLdn PLdn PLdn PLdn PLdn PLdn PLdn	TUE TUE TUE TUE TUE
14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1900z	17/08 17/08 17/08 17/08 17/08 17/08 17/08	Fair Fair Fair Weak Weak	m28s m28s m28s m28s m28s m28s m28s	PLdn PLdn PLdn PLdn PLdn PLdn PLdn	TUE TUE TUE TUE TUE
14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z	17/08 17/08 17/08 17/08 17/08 17/08	Fair Fair Fair Fair Weak Weak	m28s m28s m28s m28s m28s m28s	PLdn PLdn PLdn PLdn PLdn PLdn PLdn	TUE TUE TUE TUE TUE
14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1900z 13918kHz 1910z	17/08 17/08 17/08 17/08 17/08 17/08 17/08 22/08	Fair Fair Fair Fair Weak Weak Strong V.strong	m28s m28s m28s m28s m28s m28s m28s m28s	PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	TUE TUE TUE TUE TUE SUN SUN
14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1900z 13918kHz 1910z 12218kHz 1920z	17/08 17/08 17/08 17/08 17/08 17/08 17/08 22/08 22/08 22/08	Fair Fair Fair Fair Weak Weak Strong V.strong Strong	m28s m28s m28s m28s m28s m28s m28s m28s	PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	TUE TUE TUE TUE TUE SUN SUN SUN
14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1900z 13918kHz 1910z	17/08 17/08 17/08 17/08 17/08 17/08 17/08 22/08	Fair Fair Fair Fair Weak Weak Strong V.strong	m28s m28s m28s m28s m28s m28s m28s m28s	PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	TUE TUE TUE TUE TUE SUN SUN
14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z	17/08 17/08 17/08 17/08 17/08 17/08 17/08 22/08 22/08 22/08 22/08	Fair Fair Fair Fair Weak Weak Strong V.strong Strong Strong	m28s m28s m28s m28s m28s m28s m28s m28s	PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	TUE TUE TUE TUE TUE SUN SUN SUN
14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z	17/08 17/08 17/08 17/08 17/08 17/08 17/08 22/08 22/08 22/08 22/08 22/08	Fair Fair Fair Fair Weak Weak Strong V.strong Strong V.strong V.strong	m28s m28s m28s m28s m28s m28s m28s m28s	PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	TUE TUE TUE TUE TUE SUN SUN SUN SUN SUN
14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z	17/08 17/08 17/08 17/08 17/08 17/08 17/08 22/08 22/08 22/08 22/08	Fair Fair Fair Fair Weak Weak Strong V.strong Strong Strong	m28s m28s m28s m28s m28s m28s m28s m28s	PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	TUE TUE TUE TUE TUE SUN SUN SUN
14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z	17/08 17/08 17/08 17/08 17/08 17/08 17/08 22/08 22/08 22/08 22/08 22/08	Fair Fair Fair Fair Weak Weak Strong V.strong Strong V.strong V.strong	m28s m28s m28s m28s m28s m28s m28s m28s	PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	TUE TUE TUE TUE TUE SUN SUN SUN SUN SUN
14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z	17/08 17/08 17/08 17/08 17/08 17/08 17/08 22/08 22/08 22/08 22/08 22/08 22/08	Fair Fair Fair Fair Weak Weak Strong V.strong Strong Strong Strong	m28s m28s m28s m28s m28s m28s m28s m28s	PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	TUE TUE TUE TUE TUE SUN SUN SUN SUN SUN SUN
14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z	17/08 17/08 17/08 17/08 17/08 17/08 17/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08	Fair Fair Fair Fair Weak Weak Strong V.strong Strong V.strong V.strong	m28s m28s m28s m28s m28s m28s m28s m28s	PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	TUE TUE TUE TUE TUE SUN SUN SUN SUN SUN SUN TUE
14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z	17/08 17/08 17/08 17/08 17/08 17/08 17/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08	Fair Fair Fair Fair Weak Weak Strong V.strong Strong Strong Strong Strong Strong	m28s m28s m28s m28s m28s m28s m28s m28s	PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	TUE TUE TUE TUE TUE SUN SUN SUN SUN SUN SUN TUE
14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1950z 14918kHz 1900z 13918kHz 1910z	17/08 17/08 17/08 17/08 17/08 17/08 17/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 24/08	Fair Fair Fair Fair Weak Weak Strong V.strong Strong Strong Strong Strong Strong Strong	m28s m28s m28s m28s m28s m28s m28s m28s	PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	TUE TUE TUE TUE TUE SUN SUN SUN SUN SUN SUN TUE
14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z	17/08 17/08 17/08 17/08 17/08 17/08 17/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08	Fair Fair Fair Fair Weak Weak Strong V.strong Strong Strong Strong Strong Strong	m28s m28s m28s m28s m28s m28s m28s m28s	PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	TUE TUE TUE TUE TUE SUN SUN SUN SUN SUN SUN TUE TUE
14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1950z 14918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1950z 14918kHz 1900z 13918kHz 1910z 12218kHz 1910z 12218kHz 1920z	17/08 17/08 17/08 17/08 17/08 17/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08	Fair Fair Fair Fair Weak Weak Strong V.strong Strong Strong Strong Strong Strong Strong Strong Strong	m28s m28s m28s m28s m28s m28s m28s m28s	PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	TUE TUE TUE TUE TUE SUN SUN SUN SUN SUN SUN TUE TUE
14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1950z 14918kHz 1950z 14918kHz 1910z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z	17/08 17/08 17/08 17/08 17/08 17/08 17/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08	Fair Fair Fair Fair Weak Weak Strong V.strong Strong	m28s m28s m28s m28s m28s m28s m28s m28s	PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	TUE TUE TUE TUE TUE SUN SUN SUN SUN SUN TUE TUE TUE TUE
14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1950z 14918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1950z 14918kHz 1900z 13918kHz 1910z 12218kHz 1910z 12218kHz 1920z	17/08 17/08 17/08 17/08 17/08 17/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08	Fair Fair Fair Fair Weak Weak Strong V.strong Strong Strong Strong Strong Strong Strong Strong Strong	m28s m28s m28s m28s m28s m28s m28s m28s	PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	TUE TUE TUE TUE TUE SUN SUN SUN SUN SUN SUN TUE TUE
14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1950z 14918kHz 1910z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1930z 10218kHz 1930z 10218kHz 1930z	17/08 17/08 17/08 17/08 17/08 17/08 17/08 22/08	Fair Fair Fair Fair Weak Weak Strong V.strong Strong Fair	m28s m28s m28s m28s m28s m28s m28s m28s	PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	TUE TUE TUE TUE SUN SUN SUN SUN SUN TUE TUE TUE TUE TUE TUE TUE TUE TUE
14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1950z 14918kHz 1950z 14918kHz 1910z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z	17/08 17/08 17/08 17/08 17/08 17/08 17/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08	Fair Fair Fair Fair Weak Weak Strong V.strong Strong	m28s m28s m28s m28s m28s m28s m28s m28s	PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	TUE TUE TUE TUE TUE SUN SUN SUN SUN SUN TUE TUE TUE TUE
14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1950z 14918kHz 1910z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1930z 10218kHz 1930z 10218kHz 1930z	17/08 17/08 17/08 17/08 17/08 17/08 17/08 22/08	Fair Fair Fair Fair Weak Weak Strong V.strong Strong Fair	m28s m28s m28s m28s m28s m28s m28s m28s	PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	TUE TUE TUE TUE SUN SUN SUN SUN SUN TUE TUE TUE TUE TUE TUE TUE TUE TUE
14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1950z 14918kHz 1910z 13918kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1930z 10218kHz 1940z 9118kHz 1940z 9118kHz 1940z 9118kHz 1940z	17/08 17/08 17/08 17/08 17/08 17/08 17/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 24/08 24/08 24/08 24/08 24/08	Fair Fair Fair Fair Weak Weak  Strong V.strong Strong Fair Strong	m28s m28s m28s m28s m28s m28s m28s m28s	PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	TUE TUE TUE TUE TUE SUN SUN SUN SUN TUE
14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1950z 14918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1950z 14918kHz 1920z 11118kHz 1930z 10218kHz 1940z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z	17/08 17/08 17/08 17/08 17/08 17/08 17/08 22/08 22/08 22/08 22/08 22/08 22/08 24/08 24/08 24/08 24/08 24/08 24/08	Fair Fair Fair Fair Weak Weak  Strong V.strong Strong Strong Strong Strong Strong Strong Strong Strong Strong Fair Strong Fair	m28s m28s m28s m28s m28s m28s m28s m28s	PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	TUE TUE TUE TUE SUN SUN SUN SUN TUE
14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1950z 14918kHz 1910z 13918kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1930z 10218kHz 1940z 9118kHz 1940z 9118kHz 1940z 9118kHz 1940z	17/08 17/08 17/08 17/08 17/08 17/08 17/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 24/08 24/08 24/08 24/08 24/08	Fair Fair Fair Fair Weak Weak  Strong V.strong Strong Fair Strong	m28s m28s m28s m28s m28s m28s m28s m28s	PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	TUE TUE TUE TUE TUE SUN SUN SUN SUN TUE
14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1950z 14918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1950z 14918kHz 1920z 11118kHz 1930z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1940z 9118kHz 1950z	17/08 17/08 17/08 17/08 17/08 17/08 17/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 24/08 24/08 24/08 24/08 24/08 24/08 24/08	Fair Fair Fair Fair Weak Weak  Strong V.strong Strong Strong Strong Strong Strong Strong Strong Strong Fair Strong Fair Fair	m28s m28s m28s m28s m28s m28s m28s m28s	PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	TUE TUE TUE TUE SUN SUN SUN SUN TUE
14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1950z 14918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1950z 14918kHz 1920z 11118kHz 1930z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z	17/08 17/08 17/08 17/08 17/08 17/08 17/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 24/08 24/08 24/08 24/08 24/08 24/08 24/08 24/08 24/08 29/08 29/08	Fair Fair Fair Fair Weak Weak  Strong V.strong Strong Strong Strong Strong Strong Strong Strong Fair Fair Fair Fair	m28s m28s m28s m28s m28s m28s m28s m28s	PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	TUE TUE TUE TUE TUE SUN SUN SUN SUN TUE
14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1950z 14918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1950z 14918kHz 1920z 11118kHz 1930z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1940z 9118kHz 1950z	17/08 17/08 17/08 17/08 17/08 17/08 17/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 24/08 24/08 24/08 24/08 24/08 24/08 24/08	Fair Fair Fair Fair Weak Weak  Strong V.strong Strong Strong Strong Strong Strong Strong Strong Strong Fair Strong Fair Fair	m28s m28s m28s m28s m28s m28s m28s m28s	PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	TUE TUE TUE TUE SUN SUN SUN SUN TUE
14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1950z 14918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1950z 14918kHz 1950z 14918kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1950z	17/08 17/08 17/08 17/08 17/08 17/08 17/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 24/08 24/08 24/08 24/08 24/08 24/08 24/08 24/08 24/08 24/08 24/08 24/08 24/08	Fair Fair Fair Fair Fair Weak Weak Strong V.strong Strong Strong Strong Strong Strong Strong Fair Strong Fair Fair Fair Weak	m28s m28s m28s m28s m28s m28s m28s m28s	PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	TUE TUE TUE TUE TUE TUE SUN SUN SUN SUN TUE
14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1950z 14918kHz 1950z 14918kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1950z	17/08 17/08 17/08 17/08 17/08 17/08 17/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 24/08 24/08 24/08 24/08 24/08 24/08 24/08 29/08 29/08 29/08 29/08	Fair Fair Fair Fair Weak Weak Strong V.strong Strong Strong Strong Strong Strong Strong Strong Fair Strong Fair Fair Fair Weak Weak	m28s m28s m28s m28s m28s m28s m28s m28s	PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	TUE TUE TUE TUE TUE SUN SUN SUN SUN TUE
14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1950z 14918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1950z 14918kHz 1950z 14918kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1950z	17/08 17/08 17/08 17/08 17/08 17/08 17/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 24/08 24/08 24/08 24/08 24/08 24/08 24/08 24/08 24/08 24/08 24/08 24/08 24/08	Fair Fair Fair Fair Fair Weak Weak Strong V.strong Strong Strong Strong Strong Strong Strong Fair Strong Fair Fair Fair Weak	m28s m28s m28s m28s m28s m28s m28s m28s	PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	TUE TUE TUE TUE TUE SUN SUN SUN SUN TUE
14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1950z 14918kHz 1950z 14918kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1950z	17/08 17/08 17/08 17/08 17/08 17/08 17/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 24/08 24/08 24/08 24/08 24/08 24/08 24/08 29/08 29/08 29/08 29/08	Fair Fair Fair Fair Weak Weak Strong V.strong Strong Strong Strong Strong Strong Strong Strong Fair Strong Fair Fair Fair Weak Weak	m28s m28s m28s m28s m28s m28s m28s m28s	PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	TUE TUE TUE TUE TUE SUN SUN SUN SUN TUE
14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1950z 14918kHz 1950z 14918kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1950z 14918kHz 1950z 14918kHz 1950z 14918kHz 1950z 14918kHz 1950z 14918kHz 1950z 14918kHz 1920z 11118kHz 1930z 10218kHz 1940z 11118kHz 1930z 10218kHz 1940z 9118kHz 1940z 9118kHz 1950z	17/08 17/08 17/08 17/08 17/08 17/08 17/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 24/08 24/08 24/08 24/08 24/08 24/08 24/08 24/08 24/08 29/08 29/08 29/08 29/08	Fair Fair Fair Fair Weak Weak Strong V.strong Strong Strong Strong Strong Strong Strong Fair Strong Fair Fair Fair Weak Weak Strong	m28s m28s m28s m28s m28s m28s m28s m28s	PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	TUE TUE TUE TUE TUE SUN
14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1950z 14918kHz 1950z 14918kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1950z	17/08 17/08 17/08 17/08 17/08 17/08 17/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 24/08 24/08 24/08 24/08 24/08 24/08 24/08 29/08 29/08 29/08 29/08	Fair Fair Fair Fair Weak Weak Strong V.strong Strong Strong Strong Strong Strong Strong Strong Fair Strong Fair Fair Fair Weak Weak	m28s m28s m28s m28s m28s m28s m28s m28s	PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	TUE TUE TUE TUE TUE SUN SUN SUN SUN TUE
14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1950z 14918kHz 1920z 11118kHz 1930z 10218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1950z 14918kHz 1950z 14918kHz 1950z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 11118kHz 1930z 10218kHz 1940z 10218kHz 1940z 9118kHz 1950z	17/08 17/08 17/08 17/08 17/08 17/08 17/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 24/08 24/08 24/08 24/08 24/08 24/08 24/08 24/08 24/08 24/08 24/08 24/08 24/08 24/08	Fair Fair Fair Fair Fair Weak Weak Strong V.strong Strong Strong Strong Strong Strong Strong Fair Strong Fair Fair Fair Fair Fair Weak Weak Strong Strong	m28s m28s m28s m28s m28s m28s m28s m28s m28s m28s m28s m28s m28s m28s m40s	PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	TUE TUE TUE TUE TUE SUN
14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1950z 14918kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1950z 14918kHz 1950z 14918kHz 1950z 14918kHz 1950z 14918kHz 1950z 14918kHz 1950z 11118kHz 1930z 10218kHz 1940z 11118kHz 1930z 10218kHz 1940z 11118kHz 1950z 11118kHz 1950z	17/08 17/08 17/08 17/08 17/08 17/08 17/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 24/08 24/08 24/08 24/08 24/08 24/08 24/08 24/08 29/08 29/08 29/08 29/08 29/08 29/08 31/08	Fair Fair Fair Fair Fair Weak Weak  Strong V.strong Strong V.strong	m28s m28s m28s m28s m28s m28s m28s m28s m28s m28s m28s m28s m28s m28s m40s	PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	TUE TUE TUE TUE TUE SUN SUN SUN SUN TUE
14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1950z 14918kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1950z 14918kHz 1950z 14918kHz 1950z 14918kHz 1950z 14918kHz 1950z 14918kHz 1950z 11118kHz 1930z 10218kHz 1940z 11118kHz 1930z 10218kHz 1940z 11118kHz 1950z 11118kHz 1950z	17/08 17/08 17/08 17/08 17/08 17/08 17/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 24/08 24/08 24/08 24/08 24/08 24/08 24/08 24/08 29/08 29/08 29/08 29/08 29/08 29/08 31/08	Fair Fair Fair Fair Fair Weak Weak Strong V.strong Strong Fair Strong Fair Fair Fair Weak Weak Strong Strong	m28s m28s m28s m28s m28s m28s m28s m28s m28s m28s m28s m28s m28s m28s m40s	PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	TUE TUE TUE TUE TUE SUN SUN SUN SUN TUE
14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1950z 14918kHz 1950z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1950z 14918kHz 1950z 14918kHz 1950z 14918kHz 1950z 14918kHz 1950z 11118kHz 1950z 11118kHz 1950z 11118kHz 1950z 11118kHz 1950z 11118kHz 1950z 11118kHz 1950z 11118kHz 1950z	17/08 17/08 17/08 17/08 17/08 17/08 17/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 24/08 24/08 24/08 24/08 24/08 24/08 29/08 29/08 29/08 29/08 29/08 31/08 31/08 31/08	Fair Fair Fair Fair Weak Weak  Strong V.strong Strong V.strong V.strong V.strong V.strong V.strong	m28s m28s m28s m28s m28s m28s m28s m28s m28s m28s m28s m28s m28s m28s m40s	PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	TUE TUE TUE TUE TUE SUN SUN SUN SUN TUE
14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1950z 14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1950z	17/08 17/08 17/08 17/08 17/08 17/08 17/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 24/08 24/08 24/08 24/08 24/08 24/08 29/08 29/08 29/08 29/08 29/08 31/08 31/08 31/08	Fair Fair Fair Fair Weak Weak  Strong V.strong Strong V.strong V.strong V.strong V.strong V.strong V.strong V.strong V.strong	m28s m28s m28s m28s m28s m28s m28s m28s m28s m28s m28s m28s m28s m28s m40s	PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	TUE TUE TUE TUE TUE SUN SUN SUN SUN TUE
14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1950z 14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1950z	17/08 17/08 17/08 17/08 17/08 17/08 17/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 24/08 24/08 24/08 24/08 24/08 24/08 29/08 29/08 29/08 29/08 29/08 31/08 31/08 31/08	Fair Fair Fair Fair Weak Weak  Strong V.strong Strong V.strong V.strong V.strong V.strong V.strong V.strong V.strong V.strong	m28s m28s m28s m28s m28s m28s m28s m28s m28s m28s m28s m28s m28s m28s m40s	PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	TUE TUE TUE TUE TUE SUN SUN SUN SUN TUE
14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z  14918kHz 1950z  14918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z  14918kHz 1950z  14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z  14918kHz 1950z  11118kHz 1950z  14918kHz 1950z  14918kHz 1950z  14918kHz 1950z  14918kHz 1950z	17/08 17/08 17/08 17/08 17/08 17/08 17/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 24/08 24/08 24/08 24/08 24/08 24/08 24/08 24/08 24/08 29/08 29/08 29/08 29/08 31/08 31/08 31/08 31/08	Fair Fair Fair Fair Weak Weak  Strong V.strong Strong Fair Fair Weak Weak Strong V.strong V.strong V.strong V.strong V.strong Strong Strong Strong Strong Strong Strong Strong Strong Strong	m28s m28s m28s m28s m28s m28s m28s m28s	PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	TUE TUE TUE TUE TUE TUE SUN SUN SUN SUN TUE
14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1950z 14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z 14918kHz 1950z	17/08 17/08 17/08 17/08 17/08 17/08 17/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 24/08 24/08 24/08 24/08 24/08 24/08 29/08 29/08 29/08 29/08 29/08 31/08 31/08 31/08	Fair Fair Fair Fair Weak Weak  Strong V.strong Strong V.strong V.strong V.strong V.strong V.strong V.strong V.strong V.strong	m28s m28s m28s m28s m28s m28s m28s m28s m28s m28s m28s m28s m28s m28s m40s	PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	TUE TUE TUE TUE TUE TUE SUN SUN SUN SUN TUE
14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z  14918kHz 1950z  14918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z  14918kHz 1950z  14918kHz 1900z 13918kHz 1910z 12218kHz 1920z 11118kHz 1930z 10218kHz 1940z 9118kHz 1950z  14918kHz 1950z  11118kHz 1950z  14918kHz 1950z  14918kHz 1950z  14918kHz 1950z  14918kHz 1950z	17/08 17/08 17/08 17/08 17/08 17/08 17/08 22/08 22/08 22/08 22/08 22/08 22/08 22/08 24/08 24/08 24/08 24/08 24/08 24/08 24/08 24/08 24/08 29/08 29/08 29/08 29/08 31/08 31/08 31/08 31/08	Fair Fair Fair Fair Weak Weak  Strong V.strong Strong Fair Fair Weak Weak Strong V.strong V.strong V.strong V.strong V.strong Strong Strong Strong Strong Strong Strong Strong Strong Strong	m28s m28s m28s m28s m28s m28s m28s m28s	PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	TUE TUE TUE TUE TUE SUN SUN SUN SUN TUE

### MON/SAT

### July 2021

15876kHz 1200z	03/07	Fair	4m28s			PLdn	SAT
14876kHz 1210z	03/07	Fair	4m28s			PLdn	SAT
14376kHz 1220z	03/07	Weak	4m28s			PLdn	SAT
13976kHz 1230z	03/07	Weak	4m28s			PLdn	SAT
13376kHz 1240z	03/07	Strong	4m28s			PLdn	SAT
12176kHz 1250z	03/07	_		QRM5		PLdn	SAT
1217 011112 120 02	05/07			Q14.10		1 20	5.11
15876kHz 1200z	05/07	V.weak	1m30s		Apparently unworkable throughout this schedule	PLdn	MON
14876kHz 1210z	05/07	V.weak	1m30s		** *	PLdn	MON
14376kHz 1220z	05/07	V.weak	1m30s			PLdn	MON
13976kHz 1230z	05/07	V.weak	1m30s			PLdn	MON
13376kHz 1240z	05/07	V.weak	1m30s			PLdn	MON
12176kHz 1250z	05/07	NRH				PLdn	MON
15055111 1000	40.00		4 00				a . m
15876kHz 1200z	10/07	Weak	1m30s			PLdn	SAT
14876kHz 1210z	10/07	Fair	1m30s			PLdn	SAT
14376kHz 1220z	10/07	Fair	1m30s			PLdn	SAT
13976kHz 1230z	10/07	Weak	1m30s			PLdn	SAT
						PLdn	
13376kHz 1240z	10/07	Weak	1m30s				SAT
12176kHz 1250z	10/07	Weak	1m30s			PLdn	SAT
15056111 1200	10/07	** 1				Dr. I	1.601
15876kHz 1200z	12/07	Unworka	ible			PLdn	MON
14876kHz 1210z	12/07	Unworka	ble			PLdn	MON
14376kHz 1220z	12/07	Unworka	ıdie			PLdn	MON
13976kHz 1230z	12/07	V. weak				PLdn	MON
13376kHz 1240z	12/07	V. weak				PLdn	MON
12176kHz 1250z	12/07	V. weak				PLdn	MON
1217 011112 120 02	12,0,					1 20	1,101,
15876kHz 1200z	17/07	Weak	4m28s			PLdn	SAT
14876kHz 1210z	17/07	Weak	4m28s			PLdn	SAT
14376kHz 1220z	17/07	Weak	4m28s			PLdn	SAT
13976kHz 1230z	17/07	Weak	4m28s			PLdn	SAT
13376kHz 1240z	17/07	Fair	4m28s	QRM3		PLdn	SAT
12176kHz 1250z	17/07	Weak	4m28s			PLdn	SAT
12170KHZ 1230Z	17707	Weth	1111203			I Edii	5711
15876kHz 1200z	19/07	V. weak				PLdn	MON
14876kHz 1210z	19/07	V. weak				PLdn	MON
		v. weak					MON
14376kHz 1220z	19/07	V. weak				PLdn	MON
14376kHz 1220z	19/07	V. weak				PLdn PLdn	MON
13976kHz 1230z	19/07	V. weak				PLdn	MON
	19/07						
13976kHz 1230z 13376kHz 1240z	19/07 19/07	V. weak V. weak				PLdn PLdn	MON MON
13976kHz 1230z	19/07	V. weak				PLdn	MON
13976kHz 1230z 13376kHz 1240z	19/07 19/07	V. weak V. weak				PLdn PLdn	MON MON
13976kHz 1230z 13376kHz 1240z 12176kHz 1250z	19/07 19/07 19/07	V. weak V. weak V. weak	)			PLdn PLdn PLdn	MON MON MON
13976kHz 1230z 13376kHz 1240z	19/07 19/07 19/07	V. weak V. weak	)			PLdn PLdn	MON MON
13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 24/07	19/07 19/07 19/07 NOT MO	V. weak V. weak V. weak ONITORED				PLdn PLdn PLdn PLdn	MON MON MON SAT
13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 24/07	19/07 19/07 19/07 NOT MO	V. weak V. weak V. weak ONITORED	4m28s			PLdn PLdn PLdn	MON MON MON
13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 24/07 15876kHz 1200z	19/07 19/07 19/07 NOT MO 26/07	V. weak V. weak V. weak ONITORED	4m28s			PLdn PLdn PLdn PLdn PLdn	MON MON MON SAT MON
13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 24/07 15876kHz 1200z 14876kHz 1210z	19/07 19/07 19/07 NOT MO 26/07 26/07	V. weak V. weak V. weak ONITORED Fair Fair	4m28s 4m28s			PLdn PLdn PLdn PLdn PLdn PLdn PLdn	MON MON MON SAT MON MON
13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 24/07 15876kHz 1200z	19/07 19/07 19/07 NOT MO 26/07	V. weak V. weak V. weak ONITORED	4m28s			PLdn PLdn PLdn PLdn PLdn	MON MON MON SAT MON
13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 24/07 15876kHz 1200z 14876kHz 1210z 14376kHz 1220z	19/07 19/07 19/07 NOT MO 26/07 26/07 26/07	V. weak V. weak V. weak ONITORED Fair Fair Fair Fair	4m28s 4m28s 4m28s			PLdn PLdn PLdn PLdn PLdn PLdn PLdn	MON MON MON SAT MON MON MON
13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 24/07 15876kHz 1200z 14876kHz 1210z 14376kHz 1220z 13976kHz 1230z	19/07 19/07 19/07 NOT MO 26/07 26/07 26/07 26/07	V. weak V. weak V. weak ONITORED Fair Fair Fair Weak	4m28s 4m28s 4m28s 4m28s			PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	MON MON SAT MON MON MON MON
13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 24/07 15876kHz 1200z 14876kHz 1210z 14376kHz 1220z	19/07 19/07 19/07 NOT MO 26/07 26/07 26/07	V. weak V. weak V. weak ONITORED Fair Fair Fair Fair	4m28s 4m28s 4m28s			PLdn PLdn PLdn PLdn PLdn PLdn PLdn	MON MON MON SAT MON MON MON
13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 24/07 15876kHz 1200z 14876kHz 1210z 14376kHz 1220z 13976kHz 1230z 13376kHz 1240z	19/07 19/07 19/07 NOT MO 26/07 26/07 26/07 26/07 26/07	V. weak V. weak V. weak ONITORED Fair Fair Fair Weak Weak	4m28s 4m28s 4m28s 4m28s 4m28s			PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	MON MON SAT MON MON MON MON MON
13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 24/07 15876kHz 1200z 14876kHz 1210z 14376kHz 1220z 13976kHz 1230z	19/07 19/07 19/07 NOT MO 26/07 26/07 26/07 26/07	V. weak V. weak V. weak ONITORED Fair Fair Fair Weak	4m28s 4m28s 4m28s 4m28s			PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	MON MON SAT MON MON MON MON
13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 24/07 15876kHz 1200z 14876kHz 1210z 14376kHz 1220z 13976kHz 1230z 13376kHz 1240z 12176kHz 1250z	19/07 19/07 19/07 NOT MO 26/07 26/07 26/07 26/07 26/07	V. weak V. weak V. weak ONITORED Fair Fair Fair Weak Weak Weak	4m28s 4m28s 4m28s 4m28s 4m28s 4m28s			PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	MON MON SAT MON MON MON MON MON MON
13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 24/07 15876kHz 1200z 14876kHz 1210z 14376kHz 1220z 13976kHz 1230z 13376kHz 1240z	19/07 19/07 19/07 NOT MO 26/07 26/07 26/07 26/07 26/07	V. weak V. weak V. weak ONITORED Fair Fair Fair Weak Weak	4m28s 4m28s 4m28s 4m28s 4m28s			PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	MON MON SAT MON MON MON MON MON
13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 24/07 15876kHz 1200z 14876kHz 1210z 14376kHz 1220z 13976kHz 1230z 13376kHz 1240z 12176kHz 1250z	19/07 19/07 19/07 NOT MO 26/07 26/07 26/07 26/07 26/07 31/07	V. weak V. weak V. weak ONITORED Fair Fair Fair Weak Weak Weak Weak	4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s			PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	MON MON SAT MON MON MON MON MON MON MON
13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 24/07 15876kHz 1200z 14876kHz 1210z 14376kHz 1220z 13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 15876kHz 1200z 14876kHz 1210z	19/07 19/07 19/07 NOT MO 26/07 26/07 26/07 26/07 26/07 31/07 31/07	V. weak V. weak V. weak ONITORED Fair Fair Fair Weak Weak Weak Weak Weak	4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s			PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	MON MON SAT MON MON MON MON MON MON SAT SAT
13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 24/07 15876kHz 1200z 14876kHz 1210z 14376kHz 1220z 13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 15876kHz 1200z 14876kHz 1210z 14376kHz 1210z 14376kHz 1220z	19/07 19/07 19/07 NOT MO 26/07 26/07 26/07 26/07 26/07 31/07 31/07	V. weak V. weak V. weak ONITORED Fair Fair Weak Weak Weak Weak Weak Weak Weak Weak	4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s			PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	MON MON SAT MON MON MON MON MON MON SAT SAT SAT
13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 24/07 15876kHz 1200z 14876kHz 1210z 14376kHz 1220z 13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 15876kHz 1200z 14876kHz 1210z	19/07 19/07 19/07 NOT MO 26/07 26/07 26/07 26/07 26/07 31/07 31/07	V. weak V. weak V. weak ONITORED Fair Fair Fair Weak Weak Weak Weak Weak	4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s			PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	MON MON SAT MON MON MON MON MON MON SAT SAT
13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 24/07 15876kHz 1200z 14876kHz 1210z 14376kHz 1220z 13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 15876kHz 1200z 14876kHz 1210z 14376kHz 1220z 13976kHz 1220z 13976kHz 1230z	19/07 19/07 19/07 NOT MO 26/07 26/07 26/07 26/07 26/07 31/07 31/07 31/07	V. weak V. weak V. weak ONITORED Fair Fair Fair Weak Weak Weak Weak Weak Weak Weak Weak	4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s			PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	MON MON SAT MON MON MON MON MON MON SAT SAT SAT
13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 24/07 15876kHz 1200z 14876kHz 1210z 14376kHz 1220z 13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 15876kHz 1200z 14876kHz 1210z 14376kHz 1220z 13976kHz 1220z 13976kHz 1230z 13376kHz 1230z 13376kHz 1240z	19/07 19/07 19/07 19/07 NOT MO 26/07 26/07 26/07 26/07 26/07 31/07 31/07 31/07 31/07	V. weak V. weak V. weak ONITORED Fair Fair Fair Weak Weak Weak Weak Weak Weak Weak Weak	4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s			PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	MON MON MON SAT MON MON MON MON SAT SAT SAT SAT SAT
13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 24/07 15876kHz 1200z 14876kHz 1210z 14376kHz 1220z 13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 15876kHz 1200z 14876kHz 1210z 14376kHz 1220z 13976kHz 1220z 13976kHz 1230z	19/07 19/07 19/07 NOT MO 26/07 26/07 26/07 26/07 26/07 31/07 31/07 31/07	V. weak V. weak V. weak ONITORED Fair Fair Fair Weak Weak Weak Weak Weak Weak Weak Weak	4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s			PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	MON MON SAT MON MON MON MON MON MON SAT SAT SAT
13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 24/07 15876kHz 1200z 14876kHz 1210z 14376kHz 1220z 13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 15876kHz 1200z 14876kHz 1210z 14376kHz 1220z 13976kHz 1220z 13976kHz 1230z 13376kHz 1230z 13376kHz 1240z	19/07 19/07 19/07 19/07 NOT MO 26/07 26/07 26/07 26/07 26/07 31/07 31/07 31/07 31/07	V. weak V. weak V. weak ONITORED Fair Fair Fair Weak Weak Weak Weak Weak Weak Weak Weak	4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s			PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	MON MON MON SAT MON MON MON MON SAT SAT SAT SAT SAT
13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 24/07 15876kHz 1200z 14876kHz 1210z 14376kHz 1220z 13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 15876kHz 1200z 14876kHz 1210z 14376kHz 1220z 13376kHz 1220z 13376kHz 1230z 13376kHz 1240z 12176kHz 1250z	19/07 19/07 19/07 19/07 NOT MO 26/07 26/07 26/07 26/07 26/07 31/07 31/07 31/07 31/07	V. weak V. weak V. weak ONITORED Fair Fair Fair Weak Weak Weak Weak Weak Weak Weak Weak	4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s			PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	MON MON MON SAT MON MON MON MON SAT SAT SAT SAT SAT
13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 24/07 15876kHz 1200z 14876kHz 1210z 14376kHz 1220z 13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 15876kHz 1200z 14876kHz 1210z 14376kHz 1220z 13976kHz 1220z 13976kHz 1230z 13376kHz 1230z 13376kHz 1240z	19/07 19/07 19/07 19/07 NOT MO 26/07 26/07 26/07 26/07 26/07 31/07 31/07 31/07 31/07	V. weak V. weak V. weak ONITORED Fair Fair Fair Weak Weak Weak Weak Weak Weak Weak Weak	4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s			PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	MON MON MON SAT MON MON MON MON SAT SAT SAT SAT SAT
13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 24/07 15876kHz 1200z 14876kHz 1210z 14376kHz 1220z 13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 15876kHz 1200z 14876kHz 1210z 14376kHz 1220z 13376kHz 1220z 13376kHz 1230z 13376kHz 1240z 12176kHz 1250z	19/07 19/07 19/07 19/07 NOT MO 26/07 26/07 26/07 26/07 26/07 31/07 31/07 31/07 31/07	V. weak V. weak V. weak ONITORED Fair Fair Fair Weak Weak Weak Weak Weak Weak Weak Weak	4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s			PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	MON MON MON SAT MON MON MON MON SAT SAT SAT SAT SAT
13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 24/07 15876kHz 1200z 14876kHz 1210z 14376kHz 1220z 13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 15876kHz 1210z 14376kHz 1210z 14376kHz 1220z 13976kHz 1230z 13376kHz 1240z 12176kHz 1250z August 2021	19/07 19/07 19/07 19/07 NOT MO 26/07 26/07 26/07 26/07 31/07 31/07 31/07 31/07 31/07	V. weak V. weak V. weak ONITORED Fair Fair Fair Weak Weak Weak Weak Weak Weak Weak Weak	4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s			PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	MON MON MON SAT MON MON MON MON SAT SAT SAT SAT SAT SAT
13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 24/07 15876kHz 1200z 14876kHz 1210z 14376kHz 1220z 13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 15876kHz 1210z 14376kHz 1220z 13976kHz 1220z 13976kHz 1220z 13976kHz 1230z 13376kHz 1240z 12176kHz 1250z August 2021 15876kHz 1200z	19/07 19/07 19/07 19/07 NOT MO 26/07 26/07 26/07 26/07 31/07 31/07 31/07 31/07 31/07	V. weak V. weak V. weak ONITORED Fair Fair Fair Weak Weak Weak Weak Weak Weak Weak Weak	4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s	onwa.		PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	MON MON MON SAT MON MON MON MON SAT SAT SAT SAT SAT SAT
13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 24/07 15876kHz 1200z 14876kHz 1210z 14376kHz 1220z 13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 15876kHz 1210z 14376kHz 1210z 14376kHz 1220z 13976kHz 1230z 13376kHz 1240z 12176kHz 1250z August 2021	19/07 19/07 19/07 19/07 NOT MO 26/07 26/07 26/07 26/07 31/07 31/07 31/07 31/07 31/07	V. weak V. weak V. weak ONITORED Fair Fair Fair Weak Weak Weak Weak Weak Weak Weak Weak	4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s			PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	MON MON MON SAT MON MON MON MON SAT SAT SAT SAT SAT SAT
13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 24/07 15876kHz 1200z 14876kHz 1210z 14376kHz 1220z 13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 15876kHz 1200z 14876kHz 1210z 14376kHz 1220z 13976kHz 1230z 13976kHz 1240z 12176kHz 1250z August 2021 15876kHz 1250z	19/07 19/07 19/07 19/07 NOT MO 26/07 26/07 26/07 26/07 31/07 31/07 31/07 31/07 31/07 31/07	V. weak V. weak V. weak V. weak ONITORED Fair Fair Fair Weak Weak Weak Weak Weak Weak Weak Weak	4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s			PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	MON MON MON SAT MON MON MON MON SAT SAT SAT SAT SAT SAT
13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 24/07 15876kHz 1200z 14876kHz 1210z 14376kHz 1220z 13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 15876kHz 1200z 14876kHz 1210z 14376kHz 1220z 13976kHz 1230z 13376kHz 1240z 13376kHz 1250z August 2021 15876kHz 1250z	19/07 19/07 19/07 19/07 NOT MO 26/07 26/07 26/07 26/07 31/07 31/07 31/07 31/07 31/07 31/07	V. weak V. weak V. weak V. weak ONITORED Fair Fair Fair Weak Weak Weak Weak Weak Weak Weak Weak	4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s	QRM3		PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	MON MON MON SAT MON MON MON MON SAT SAT SAT SAT SAT SAT
13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 24/07 15876kHz 1200z 14876kHz 1210z 14376kHz 1220z 13376kHz 1230z 13376kHz 1240z 12176kHz 1250z 15876kHz 1200z 14876kHz 1220z 13976kHz 1220z 13976kHz 1220z 13976kHz 1230z 13376kHz 1240z 12176kHz 1250z August 2021 15876kHz 1200z 14876kHz 1250z	19/07 19/07 19/07 19/07 NOT MO 26/07 26/07 26/07 26/07 26/07 31/07 31/07 31/07 31/07 31/07 31/07 31/07	V. weak V. weak V. weak V. weak PONITORED Fair Fair Fair Weak Weak Weak Weak Weak Weak Weak Weak	4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s	QRM3 QRM3		PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	MON MON MON SAT MON MON MON MON SAT SAT SAT SAT SAT SAT
13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 24/07 15876kHz 1200z 14876kHz 1210z 14376kHz 1220z 13376kHz 1230z 13376kHz 1240z 12176kHz 1250z 15876kHz 1200z 14876kHz 1210z 14376kHz 1220z 13376kHz 1220z 13376kHz 1240z 12176kHz 1250z August 2021 15876kHz 1250z August 2021 15876kHz 1200z 14876kHz 1200z 14876kHz 1220z 13976kHz 1220z 14876kHz 1220z 14876kHz 1220z 14376kHz 1220z 14376kHz 1220z 13976kHz 1220z	19/07 19/07 19/07 19/07 NOT MO 26/07 26/07 26/07 26/07 26/07 31/07 31/07 31/07 31/07 31/07 31/07 31/07	V. weak V. weak V. weak V. weak PONITORED Fair Fair Fair Weak Weak Weak Weak Weak Weak Weak Weak	4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s	QRM3 QRM3		PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	MON MON MON SAT MON MON MON MON SAT SAT SAT SAT SAT SAT
13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 24/07 15876kHz 1200z 14876kHz 1210z 14376kHz 1220z 13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 15876kHz 1200z 14876kHz 1210z 14376kHz 1220z 13976kHz 1220z 13976kHz 1230z 13376kHz 1240z 12176kHz 1250z August 2021 15876kHz 1200z 14876kHz 1250z 44876kHz 1250z 15876kHz 1250z	19/07 19/07 19/07 19/07 NOT MO 26/07 26/07 26/07 26/07 26/07 31/07 31/07 31/07 31/07 31/07 31/07 31/07 31/07	V. weak V. weak V. weak V. weak PONITORED Fair Fair Fair Weak Weak Weak Weak Weak Weak Weak Weak	4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s	QRM3 QRM3 QRM3		PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	MON MON MON SAT MON MON MON MON SAT SAT SAT SAT SAT SAT SAT SAT
13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 24/07 15876kHz 1200z 14876kHz 1210z 14376kHz 1220z 13376kHz 1230z 13376kHz 1240z 12176kHz 1250z 15876kHz 1200z 14876kHz 1210z 14376kHz 1220z 13376kHz 1220z 13376kHz 1240z 12176kHz 1250z August 2021 15876kHz 1250z August 2021 15876kHz 1200z 14876kHz 1200z 14876kHz 1220z 13976kHz 1220z 14876kHz 1220z 14876kHz 1220z 14376kHz 1220z 14376kHz 1220z 13976kHz 1220z	19/07 19/07 19/07 19/07 NOT MO 26/07 26/07 26/07 26/07 26/07 31/07 31/07 31/07 31/07 31/07 31/07 31/07	V. weak V. weak V. weak V. weak PONITORED Fair Fair Fair Weak Weak Weak Weak Weak Weak Weak Weak	4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s	QRM3 QRM3 QRM3		PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	MON MON MON SAT MON MON MON MON SAT SAT SAT SAT SAT SAT
13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 24/07 15876kHz 1200z 14876kHz 1210z 14376kHz 1220z 13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 15876kHz 1200z 14876kHz 1210z 14376kHz 1220z 13976kHz 1220z 13976kHz 1230z 13376kHz 1240z 12176kHz 1250z August 2021 15876kHz 1200z 14876kHz 1250z 44876kHz 1250z 15876kHz 1250z	19/07 19/07 19/07 19/07 NOT MO 26/07 26/07 26/07 26/07 26/07 31/07 31/07 31/07 31/07 31/07 31/07 31/07 31/07	V. weak V. weak V. weak V. weak PONITORED Fair Fair Fair Weak Weak Weak Weak Weak Weak Weak Weak	4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s	QRM3 QRM3 QRM3		PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	MON MON MON SAT MON MON MON MON SAT SAT SAT SAT SAT SAT SAT SAT
13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 24/07 15876kHz 1200z 14876kHz 1210z 14376kHz 1220z 13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 15876kHz 1220z 14876kHz 1210z 14376kHz 1220z 13376kHz 1220z 13376kHz 1240z 12176kHz 1250z August 2021 15876kHz 1250z August 2021 15876kHz 1200z 14876kHz 1210z 14376kHz 1220z 13376kHz 1210z 14376kHz 1220z 13376kHz 1220z 13376kHz 1220z 13376kHz 1220z 13376kHz 1220z 13376kHz 1240z 12176kHz 1250z	19/07 19/07 19/07 19/07 NOT MO 26/07 26/07 26/07 26/07 31/07 31/07 31/07 31/07 31/07 31/07 02/08 02/08 02/08 02/08 02/08	V. weak V. weak V. weak V. weak P. Weak Fair Fair Weak Weak Weak Weak Weak Weak Weak Weak	4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s	QRM3 QRM3 QRM3		PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	MON MON MON SAT MON MON MON MON SAT SAT SAT SAT SAT SAT SAT MON MON MON MON MON
13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 24/07 15876kHz 1200z 14876kHz 1210z 14376kHz 1220z 13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 15876kHz 1200z 14876kHz 1220z 13976kHz 1220z 13976kHz 1230z 13376kHz 1240z 12176kHz 1250z August 2021 15876kHz 1200z 14876kHz 1220z 13476kHz 1220z 13476kHz 1220z 14876kHz 1220z 14876kHz 1220z 13376kHz 1220z 13376kHz 1220z 13376kHz 1240z 12176kHz 1250z	19/07 19/07 19/07 19/07 NOT MO 26/07 26/07 26/07 26/07 31/07 31/07 31/07 31/07 31/07 31/07 31/07 31/07 31/07 31/07 31/07 31/07 31/07 31/07 31/07 31/07 31/07	V. weak V. weak V. weak V. weak P. Weak Pair Fair Weak Weak Weak Weak Weak Weak Weak Weak	4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s	QRM3 QRM3 QRM3		PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	MON MON MON SAT MON MON MON MON SAT SAT SAT SAT SAT SAT SAT SAT SAT SAT
13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 24/07 15876kHz 1200z 14876kHz 1210z 14376kHz 1220z 13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 15876kHz 1200z 14876kHz 1210z 14376kHz 1220z 13976kHz 1230z 13376kHz 1240z 12176kHz 1250z August 2021 15876kHz 1200z 14876kHz 1210z 14876kHz 1210z 14876kHz 1220z 13976kHz 1220z 14876kHz 1220z 13976kHz 1230z 13376kHz 1220z 13376kHz 1220z 13976kHz 1250z 15876kHz 1250z	19/07 19/07 19/07 19/07 NOT MO 26/07 26/07 26/07 26/07 31/07	V. weak V. weak V. weak V. weak ONITORED Fair Fair Fair Weak Weak Weak Weak Weak Weak Weak Weak	4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s	QRM3 QRM3 QRM3		PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	MON MON MON SAT MON MON MON MON MON SAT
13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 24/07 15876kHz 1200z 14876kHz 1210z 14376kHz 1220z 13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 15876kHz 1200z 14876kHz 1210z 14376kHz 1220z 13976kHz 1230z 13376kHz 1240z 12176kHz 1250z August 2021 15876kHz 1200z 14876kHz 1210z 14876kHz 1210z 14876kHz 1220z 13976kHz 1220z 14876kHz 1220z 13976kHz 1230z 13376kHz 1220z 13376kHz 1220z 13976kHz 1250z 15876kHz 1250z	19/07 19/07 19/07 19/07 NOT MO 26/07 26/07 26/07 26/07 31/07	V. weak V. weak V. weak V. weak ONITORED Fair Fair Fair Weak Weak Weak Weak Weak Weak Weak Weak	4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s	QRM3 QRM3 QRM3		PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	MON MON MON SAT MON MON MON MON MON SAT
13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 24/07 15876kHz 1200z 14876kHz 1210z 14376kHz 1220z 13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 15876kHz 1210z 14376kHz 1220z 13976kHz 1220z 13976kHz 1220z 13976kHz 1230z 13376kHz 1240z 12176kHz 1250z August 2021 15876kHz 1200z 14876kHz 1210z 14376kHz 1210z 14376kHz 1220z 13976kHz 1220z 13976kHz 1220z 13976kHz 1250z 15876kHz 1250z 15876kHz 1250z 15876kHz 1250z 15876kHz 1250z 15876kHz 1250z 15876kHz 1250z	19/07 19/07 19/07 19/07 NOT MO 26/07 26/07 26/07 26/07 26/07 31/07	V. weak V. weak V. weak V. weak V. weak Ponitored Fair Fair Weak Weak Weak Weak Weak Weak Weak Weak	4m28s 4m28s	QRM3 QRM3 QRM3		PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	MON MON MON SAT MON MON MON MON MON MON SAT
13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 24/07 15876kHz 1200z 14876kHz 1210z 14376kHz 1220z 13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 15876kHz 1210z 14376kHz 1220z 13976kHz 1220z 13976kHz 1230z 13376kHz 1240z 12176kHz 1250z August 2021 15876kHz 1200z 14876kHz 120z 12176kHz 1250z August 2021 15876kHz 120z 14376kHz 1220z 13976kHz 1230z 14376kHz 1220z 13976kHz 1250z 15876kHz 1250z 15876kHz 1250z 15876kHz 1250z 15876kHz 1250z 15876kHz 1250z 15876kHz 1250z 15876kHz 1250z 15876kHz 1200z 14876kHz 1250z 15876kHz 1220z 13976kHz 1220z 13976kHz 1220z 13976kHz 1230z	19/07 19/07 19/07 19/07 NOT MO 26/07 26/07 26/07 26/07 26/07 31/07	V. weak V. weak V. weak V. weak V. weak Ponitored Fair Fair Weak Weak Weak Weak Weak Weak Weak Weak	4m28s 4m28s	QRM3 QRM3 QRM3		PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	MON MON MON SAT MON MON MON MON MON MON SAT
13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 24/07 15876kHz 1200z 14876kHz 1210z 14376kHz 1220z 13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 15876kHz 1210z 14376kHz 1220z 13976kHz 1220z 13976kHz 1220z 13976kHz 1230z 13376kHz 1240z 12176kHz 1250z August 2021 15876kHz 1200z 14876kHz 1210z 14376kHz 1210z 14376kHz 1220z 13976kHz 1220z 13976kHz 1220z 13976kHz 1250z 15876kHz 1250z 15876kHz 1250z 15876kHz 1250z 15876kHz 1250z 15876kHz 1250z 15876kHz 1250z	19/07 19/07 19/07 19/07 NOT MO 26/07 26/07 26/07 26/07 26/07 31/07	V. weak V. weak V. weak V. weak V. weak Ponitored Fair Fair Weak Weak Weak Weak Weak Weak Weak Weak	4m28s 4m28s	QRM3 QRM3 QRM3		PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	MON MON MON SAT MON MON MON MON MON MON SAT
13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 24/07 15876kHz 1200z 14876kHz 1220z 13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 15876kHz 1200z 14876kHz 1210z 14376kHz 1220z 13976kHz 1220z 13976kHz 1220z 13976kHz 1220z 13976kHz 1250z August 2021 15876kHz 1200z 14876kHz 1250z August 2021 15876kHz 1220z 13976kHz 1220z 13976kHz 1220z 13976kHz 1220z 13976kHz 1250z 15876kHz 1250z 15876kHz 1250z 15876kHz 1250z 15876kHz 1250z 15876kHz 1250z 15876kHz 1250z 15876kHz 1250z 15876kHz 1220z 13976kHz 1220z 13976kHz 1220z 13976kHz 1230z 13376kHz 1220z 13976kHz 1230z 13376kHz 1230z 13376kHz 1230z 13376kHz 1240z	19/07 19/07 19/07 19/07 NOT MO 26/07 26/07 26/07 26/07 26/07 31/07	V. weak V. weak V. weak V. weak V. weak Ponitored Fair Fair Fair Weak Weak Weak Weak Weak Weak Weak Weak	4m28s 4m28s	QRM3 QRM3 QRM3		PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	MON MON MON SAT MON MON MON MON MON MON SAT
13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 24/07 15876kHz 1200z 14876kHz 1220z 13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 15876kHz 1200z 14876kHz 1210z 14876kHz 1210z 14876kHz 1220z 13976kHz 1230z 13376kHz 1240z 12176kHz 1250z August 2021 15876kHz 1200z 14876kHz 1250z August 2021 15876kHz 1220z 13976kHz 1220z 13976kHz 1220z 13976kHz 1220z 13976kHz 1250z 15876kHz 1220z 13976kHz 1250z 15876kHz 1220z 13376kHz 1240z 12176kHz 1250z 14876kHz 1220z 13976kHz 1220z 13976kHz 1220z 13976kHz 1220z 13976kHz 1220z 13976kHz 1220z 13376kHz 1240z 12176kHz 1250z	19/07 19/07 19/07 19/07 NOT MO 26/07 26/07 26/07 26/07 26/07 31/07	V. weak V. weak V. weak V. weak V. weak Ponitored Fair Fair Fair Weak Weak Weak Weak Weak Weak Weak Weak	4m28s 4m28s	QRM3 QRM3 QRM3		PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	MON MON MON SAT MON MON MON MON MON MON SAT
13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 24/07 15876kHz 1200z 14876kHz 1220z 13976kHz 1230z 13376kHz 1240z 12176kHz 1250z 15876kHz 1200z 14876kHz 1210z 14376kHz 1220z 13976kHz 1220z 13976kHz 1220z 13976kHz 1220z 13976kHz 1250z August 2021 15876kHz 1200z 14876kHz 1250z August 2021 15876kHz 1220z 13976kHz 1220z 13976kHz 1220z 13976kHz 1220z 13976kHz 1250z 15876kHz 1250z 15876kHz 1250z 15876kHz 1250z 15876kHz 1250z 15876kHz 1250z 15876kHz 1250z 15876kHz 1250z 15876kHz 1220z 13976kHz 1220z 13976kHz 1220z 13976kHz 1230z 13376kHz 1220z 13976kHz 1230z 13376kHz 1230z 13376kHz 1230z 13376kHz 1240z	19/07 19/07 19/07 19/07 NOT MO 26/07 26/07 26/07 26/07 26/07 31/07	V. weak V. weak V. weak V. weak V. weak Ponitored Fair Fair Fair Weak Weak Weak Weak Weak Weak Weak Weak	4m28s 4m28s	QRM3 QRM3 QRM3		PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	MON MON MON SAT MON MON MON MON MON MON SAT

15876kHz 1200z	09/08	Weak	1m40s		PLdn	MON
14876kHz 1210z	09/08	NRH	1111403		PLdn	MON
14376kHz 1220z	09/08	Weak	1m40s		PLdn	MON
			1111408			
13976kHz 1230z	09/08	NRH	1 10		PLdn	MON
13376kHz 1240z	09/08	Weak	1m40s		PLdn	MON
12176kHz 1250z	09/08	Weak	1m40s		PLdn	MON
15876kHz 1200z	14/08	NRH			PLdn	SAT
14876kHz 1210z	14/08	Unworkab	مام	QRM4	PLdn	SAT
14376kHz 1220z			1m40s	QICIVI4	PLdn	
	14/08	Strong			PLdn PLdn	SAT SAT
13976kHz 1230z	14/08	Strong	1m40s	OD1/2		
13376kHz 1240z	14/08	Strong		QRM3	PLdn	SAT
12176kHz 1250z	14/08	Strong	1m40s	QRM2	PLdn	SAT
15876kHz 1200z	16/08	Fair	4m28s		PLdn	MON
14876kHz 1210z	16/08	Fair	4m28s	QRM3	PLdn	MON
14376kHz 1220z	16/08	Fair	4m28s	· Viano	PLdn	MON
13976kHz 1230z	16/08	Fair	4m28s		PLdn	MON
13376kHz 1240z	16/08	Fair	4m28s		PLdn	MON
12176kHz 1250z	16/08	Fair	4m28s		PLdn	MON
15876kHz 1200z	21/08	Weak	4m28s	QRM3	PLdn	SAT
14876kHz 1210z	21/08	Weak	4m28s		PLdn	SAT
14376kHz 1220z	21/08	Unworkab			PLdn	SAT
13976kHz 1230z	21/08	Fair		QRM2	PLdn	SAT
13376kHz 1240z	21/08	Fair	4m28s	Q1012	PLdn	SAT
12176kHz 1250z	21/08	Fair	4m28s		PLdn	SAT
12170KHZ 1230Z	21/00	ran	4111208		1 Luii	SAI
15876kHz 1200z	23/08	Strong	1m40s		PLdn	MON
14876kHz 1210z	23/08	Strong	1m40s	QRM3	PLdn	MON
14376kHz 1220z	23/08	Fair	1m40s		PLdn	MON
13976kHz 1230z	23/08	Fair	1m40s	QRM3	PLdn	MON
13376kHz 1240z	23/08	Weak		QRM3	PLdn	MON
12176kHz 1250z	23/08	Fair	1m40s	Y.u.D	PLdn	MON
15876kHz 1200z	28/08	NRH			PLdn	SAT
14876kHz 1210z	28/08	NRH			PLdn	SAT
14376kHz 1220z	28/08	NRH			PLdn	SAT
13976kHz 1230z	28/08	V.weak	1m40s	?	PLdn	SAT
13376kHz 1240z	28/08	V.weak	1m40s		PLdn	SAT
12176kHz 1250z	28/08	V.weak	1m40s		PLdn	SAT
15876kHz 1200z	30/08	Weak	4m28s		PLdn	MON
14876kHz 1210z	30/08	Weak	4m28s		PLdn	MON
14376kHz 1220z	30/08	Weak	4m28s		PLdn	MON
13976kHz 1230z	30/08	Fair	4m28s		PLdn	MON
13376kHz 1240z	30/08	Fair	4m28s		PLdn	MON
12176kHz 1250z	30/08	Fair	4m28s	QRM3	PLdn	MON
MEDICATE						

### WED/SAT

### August 2021

### From Ary:

13567 04-08-2021	1100 XPB1	MFSK-16	Russian	intel.				
13367 04-08-2021	1110 XPB1	MFSK-16	Russian	intel.				
12167 04-08-2021	1120 XPB1	MFSK-16	Russian	n intel.				
11567 04-08-2021	1130 XPB1	MFSK-16	Russian	n intel.				
11065 04-08-2021	1140 XPB1	MFSK-16	Russian	intel.				
10567 04-08-2021	1150 XPB1	MFSK-16	Russian	n intel.				
13567kHz 1100z	04/08	Weak				F	PLdn	SAT
13367kHz 1110z	04/08	NRH				F	PLdn	SAT
12167kHz 1120z	04/08	Weak				F	PLdn	SAT
11567kHz 1130z	04/08	NRH				F	PLdn	SAT
11067kHz 1140z	04/08	Weak				F	PLdn	SAT
10567kHz 1150z	04/08	Weak				F	PLdn	SAT
Very high local level	ls of QRM t	hroughout s	chedule					
13567kHz 1100z	11/08	Fair	2m15s			F	PLdn	WED
13367kHz 1110z	11/08	Fair	2m15s			F	PLdn	WED
12167kHz 1120z	11/08	Fair	2m15s			F	PLdn	WED
11567kHz 1130z	11/08	Weak	2m15s			F	PLdn	WED
11067kHz 1140z	11/08	Weak	2m15s			F	PLdn	WED
10567kHz 1150z	11/08	Weak	2m15s	QRM3		F	PLdn	WED
13567kHz 1100z	14/08	Fair	2m15s	QRM2		F	PLdn	SAT
13367kHz 1110z	14/08	Fair	2m15s	QRM2		F	PLdn	SAT
12167kHz 1120z	14/08	Fair	2m15s	QRM3	Other signal nearby	F	PLdn	SAT
11567kHz 1130z	14/08	Weak	2m15s			F	PLdn	SAT
11067kHz 1140z	14/08	Weak	2m15s			F	PLdn	SAT
10567kHz 1150z	14/08	NRH				F	PLdn	SAT

13567kHz 1100z 13367kHz 1110z 12167kHz 1120z 11567kHz 1130z 11067kHz 1140z 10567kHz 1150z	18/08 18/08 18/08 18/08 18/08 18/08	Fair Fair Fair Weak Weak Weak	2m15s 2m15s	QRM3 QRM3	PLdn PLdn PLdn PLdn PLdn PLdn	WED WED WED WED WED
13567kHz 1100z 13367kHz 1110z 12167kHz 1120z 11567kHz 1130z 11067kHz 1140z 10567kHz 1150z	21/08 21/08 21/08 21/08 21/08 21/08	Fair Fair Fair Weak Weak Weak	2m15s 2m15s 2m15s 2m15s 2m15s 2m15s	QRM3	PLdn PLdn PLdn PLdn PLdn PLdn	SAT SAT SAT SAT SAT SAT
13567kHz 1100z 13367kHz 1110z 12167kHz 1120z 11567kHz 1130z 11067kHz 1140z 10567kHz 1150z	25/08 25/08 25/08 25/08 25/08 25/08	Fair Fair Fair NRH Weak Weak	4m28s	QRM3 QRM3 QRM3	PLdn PLdn PLdn PLdn PLdn PLdn	WED WED WED WED WED
13567kHz 1100z 13367kHz 1110z 12167kHz 1120z 11567kHz 1130z 11067kHz 1140z 10567kHz 1150z	28/08 28/08 28/08 28/08 28/08 28/08	Weak Weak Weak Weak V.weak NRH	4m28s 4m28s 4m28s 4m28s 4m28s		PLdn PLdn PLdn PLdn PLdn PLdn	SAT SAT SAT SAT SAT SAT

### 0500z Schedule [inaudible in UK]

#### From H-FD

Mon 05.07.2021 0500Z 11168 msg 1:41 Mon 05.07.2021 0510Z 11468 msg Mon 05.07.2021 0520Z 12168 msg Mon 05.07.2021 0530Z 13368 msg Mon 05.07.2021 0540Z 13968 msg Mon 05.07.2021 0550Z 14568 msg

### From Ary [and H-FD]

11559	02-08-2021 0500 XPB1	MFSK-16	Russian intel.
12159	02-08-2021 0510 XPB1	MFSK-16	Russian intel.
13459	02-08-2021 0520 XPB1	MFSK-16	Russian intel.
13959	02-08-2021 0530 XPB1	MFSK-16	Russian intel.
14459	02-08-2021 0540 XPB1	MFSK-16	Russian intel.
14959	02-08-2021 0550 XPB1	MFSK-16	Russian intel.
11559	23-08-2021 0500 XPB1	MFSK-16	Russian intel.
12159	23-08-2021 0510 XPB1	MFSK-16	Russian intel.
13459	23-08-2021 0520 XPB1	MFSK-16	Russian intel.
13959	23-08-2021 0530 XPB1	MFSK-16	Russian intel.
14459	23-08-2021 0540 XPB1	MFSK-16	Russian intel.
14959	23-08-2021 0550 XPB1	MFSK-16	Russian intel.

# X06 Mazeilka

#### X06 Mazielka (1c) logs section

Before we come to the X06 logs, first a warm welcome to Xaver from Southern Germany on the E2K board, and hopefully you will also log X06 next time.

Date	<u> </u>		y UTC Freq Sca		Monitor	Comments			
20210706	Tue	0946-0948	12149	154263	Ary/NL	TX to Rome, G7			
20210716	Fri	1044-1104	14350	241563	Edd Smith	TX to Karachi, i. p., G187 (SDR)			
20210719	Mon	0711	11158	263514	Ary	G425, end time missing			
20210721	Wed	1155-1157	16115	215346	Edd	TX to Mumbai, i.p., good, G167, SDR			
20210728	Wed	0904-0911	16116	134265	Edd	TX to Tunis, i. p., G90 (SDR)			
20210729	Thu	1159-1200	11230	16	Edd	Good X06b (SDR)			
20210803	Tue	0803-0805	13524	125643	Edd	TX to Ulanbatar, fair, i. p. (SDR)			
20210803	Tue	0805-0808	15836	165423	Edd	TX to Brussels, good, i. p. (SDR)			
20210804	Wed	0550-0625	8924	6	Edd	<pre>Clear X06b single tone i.p., SDR(1)</pre>			
20210804	Wed	0830-0833	14631	362154	Edd	TX to Athens i.p., clear, G32 (SDR)			
20210805	Thu	1938	9000	16	Ary	Longest X06b endless test!			
20210806	Fri	0640	9000	16	Ary	End of longest X06b endless test!			
20210826	Thu	1608	14364	16	Schorschi	X06b before XPA2 with S9			
20210827	Fri	0706	16250	6	Schorschi	Fair X06b single tone variant			

- 1) Longer break than usual between the tone.
- 2) TX in August 2021, no date or weekday known

Very small report this time, but I know, that X06 is still active; we will go on logging. Many thanks to all contributors. Till the next E2K issue I say good-bye, and please stay healthy!

Jochen Numbers-, X06 Database and Teamkopf

Thanks Jochen .....

# **Hybrids**

# **HM01**

11435kHz1600z	02/07	33189 87548 13183 35225 56145 28008 HM01	AM/RDFT	Ary	FRI
Files 10323318.TXT 77258754.TXT 36221318.F1G 47133522.TXT 45535614.TXT 58082800.TXT					
11435kHz1610z	03/07	44721 87549 13184 35226 56146 28009 HM01	AM/RDFT i.p.	Ary	SAT
Files 30144472.TXT 77258754.TXT 36221318.F1G 47133522.TXT 45535614.TXT 58082800.TXT					
11435kHz1600z	04/07	44721 57721 13185 35227 56147 64131 HM01	AM/RDFT	Ary	SUN
Files 30144472.TXT 44775772.TXT 36221318.F1G 47133522.TXT 45535614.TXT 76546413.TXT					

11435kHz1557z	05/07 44722 57721 13186 35228 15411 64131 HM01 AM/RDFT	Ary	MON
Files 30144472.TXT 44775772.TXT 36221318.F1G 47133522.TXT 06311541.TXT 76546413.TXT			
11435kHz1600z	07/07 44724 57723 17531 11851 15412 64133 HM01 AM/RDFT i.p.	Ary	WED
Files 30144472.TXT 44775772.TXT 78741753.TXT 43701185.TXT 06311541.TXT 76546413.TXT			
11435kHz1557z	08/07 44725 57724 17531 11852 15413 64134 HM01 AM/RDFT	Ary	THU
Files 30144472.TXT 44775772.TXT 78741753.TXT 43701185.TXT 06311541.TXT 76546413.TXT			
11435kHz1601z	10/07 44727 57726 17533 11854 15415 64136 HM01 AM/RDFT Started in mid message.	Ary	SAT
Files 30144472.TXT 44775772.TXT 78741753.TXT 43701185.TXT 06311541.TXT 76546413.TXT			
11435kHz1556z	11/07 44728 57727 17534 11855 15416 64137 HM01 AM/RDFT	Ary	SUN
Files 30144472.TXT 44775772.TXT 78741753.TXT 43701185.TXT 06311541.TXT 76546413.TXT			
11435kHz1558z	14/07 64132 88481 17537 11858 05221 27272 HM01 AM/RDFT	Ary	WED
Files 78756413.TXT 08828848.TXT 78741753.TXT 43701185.TXT 82480522.TXT 50542727.F1C			
11435kHz1558z	15/07 64133 88482 17538 64311 05221 27273 HM01 AM/RDFT	Ary	THU
Files 78756413.TXT 08828848.TXT 78741753.TXT 12406431.TXT 82480522.TXT 50542727.F1C			
11435kHz1558z	16/07 64134 88483 23561 64311 05222 27274 HM01 AM/RDFT	Ary	FRI
Files 12406431.TXT 08828848.TXT 62342356.TXT 78756413.TXT 82480522.TXT 50542727.F1C			

11435kHz1631z	17/07 64135 88484 23561 64312 05223 27275 HM01 AM/RDFT i.p.	Ary	SAT
Files 78756413.TXT 08828848.TXT 62342356.TXT 12406431.TXT 82480522.TXT 50542727.F1C			
11435kHz1558z	18/07 64136 88485 23562 64313 05224 27276 HM01 AM/RDFT	Ary	SUN
Files 78756413.TXT 08828848.TXT 62342356.TXT 12406431.TXT 82480522.TXT 50542727.F1C			
11435kHz1600z	19/07 64137 88486 23563 64314 05225 27277 HM01 AM/RDFT i.p.	Ary	MON
Files 78756413.TXT 08828848.TXT 62342356.TXT 12406431.TXT 82480522.TXT 50542727.F1C			
11435kHz1557z	20/07 64138 88487 23564 64315 05226 83781 HM01 AM/RDFT	Ary	TUE
Files 00888378.TXT 08828848.TXT 62342356.TXT 12406431.TXT 82480522.TXT 00888378.TXT			
11435kHz1608z 11435kHz1626z	21/07 64139 82021 23565 64316 05227 83781 HM01 AM/RDFT Late start 21/07 64139 82021 23565 64316 05227 83781 HM01 AM/RDFT	Ary	WED
Files 78756413.TXT 03088202.TXT 62342356.TXT 12406431.TXT 82480522.TXT 00888378.TXT			
11435kHz1606z	22/07 14421 82021 23566 64317 05228 83782 HM01 AM/RDFT i.p.	Ary	THU
Files 36511442.F1G 03088202.TXT 62342356.TXT 12406431.TXT 82480522.TXT 00888378.TXT			
11530kHz1727z	06/07 44723 57722 13187 11851 15411 64132 HM01 AM/RDFT	Ary	TUE
Files 30144472.TXT 44775772.TXT 36221318.F1G 43701185.TXT 06311541.TXT 76546413.TXT			
11635kHz1800z 11635kHz2101z Files 78756413.TXT 44775772.TXT 78741753.TXT 43701185.TXT 06311541.TXT 50542727.F1C	12/07 64131 57728 17535 11856 15417 27271 HM01 AM/RDFT 12/07 64131 57728 17535 11856 15417 27271 HM01 AM/RDFT* *Started in mid message. Off in mid message at 2107 UTC. Back at 2116 UTC. Off at 2121 UTC	Ary Ary	MON MON

# Driver, 64, is jailed for eight months after police caught him using laser jammer on his S-class Mercedes to beat speed traps

Keith John, from Swansea, was jailed for eight months after using laser jammers Laser jammers send bright flashes towards speed cameras to stop them working John, 64, fitted two jammers but claimed he was using them as parking sensors After his trial in May, the jury found him guilty of perverting the course of justice By KATE DENNETT FOR MAILONLINE PUBLISHED: 19:41, 28 July 2021 | UPDATED: 07:55, 29 July 2021

https://www.dailymail.co.uk/news/article-9836223/Driver-64-jailed-eight-months-police-caught-using-laser-jammer-beat-speed-traps.html

A driver has been jailed after he fitted a laser jammer to his car, which confused a speed camera and stopped it from working.

Keith John, 64, from Ynysforgan, Swansea, was jailed for eight months for perverting the court of justice after he fitted two laser jammers to the front of his car to beat speed traps.

He claimed he was using them as parking sensors and had not been breaking the speed limit when his use of the jammers came to light, but an engineer slammed use of the devices as a 'deliberate scam'.

Laser jammers send bright flashes of infrared light towards a speed camera device, making it impossible for the camera to work adequately and take an accurate reading or measurement of the speed a car is being driven at.

His use of the devices was discovered when a casualty reduction officer at Go Safe Cymru was operating a speed camera on the A40 in Llanspyddid, near Brecon.

The officer noticed that although he could pick up the speed at which the cars immediately before and after the silver Mercedes were travelling, he could not pick up the speed of that one vehicle.

Recognising that the error message on his device was not normal, the incident was reported and upon investigation, police found two black rectangular objects fitted to the front of the car, one on each side of the number plate.

The devices were confirmed to be laser jammers and PC White and PC Jones of Dyfed-Powys Police went to John's home and found two further vehicles fitted with the same devices.

The two vehicles, the Mercedes, and an additional two cars registered to the property were seized and examined by Steve Callaghan, a forensic engineer at Road Safety Support.

He discovered six laser jammer systems in total across the five vehicles. One of them, a Vauxhall van, had two separate laser jamming systems and a radar and laser warning device fitted to it.

John was charged with perverting the course of justice following the incident on May 19, 2018. He pleaded not guilty, and his trial was not held until May this year.

He told Merthyr Tydfil Crown Court that the laser jammer was actually a parking sensor and that he hadn't broken the speed limit of 60mph, so he had no need to use the jamming system.

But Mr Callaghan argued that the jammers are 'all but useless' as parking sensors and insisted that it was a 'deliberate scam'.

He continued: 'While Mr John, as others have done before him, contended that the blinder jammer can function as a parking sensor, this is a deliberate scam to attempt to confuse the police and courts.

What is a speed camera jammer and how does it work?

Laser jammers are devices that can block speed camera signals used to detect how fast cars are going.

Speed cameras function by flashing an invisible light at oncoming cars to measure their speed.

Jammers operate by sending out a laser signal of a similar frequency, which effectively cancels out the camera's one.

This creates an error message and fails to capture the speed of the car.

They can usually only outsmart moving cameras as static ones use the traditional formula of speed over distance by taking multiple pictures of the vehicle.

While laser jammers are legal to buy and sell to use as parking sensors or garage door openers, it is not legal to trick a speed camera.

Their use comes under laws against perverting the course of justice, which can carry custodial sentences and/or fines.

In 2018, company director Timothy Hill, 67, attached a jammer device to his Range Rover and raised his middle finger as he drove past speed cameras.

Hill claimed he had not been driving the vehicle but pictures showed him from behind the wheel of the car.

He was later jailed for eight months for perverting the course of justice.

'Mr John's S-class Mercedes, one of the most well-equipped and luxurious cars by reputation and quality, needed no additional device to supplement the excellent parking aids on his car.

The blinder jammer is primarily a device used to trick the police into thinking their equipment is defective while the driver using it can speed with impunity.

In any case it should be recognised that laser jamming devices are all but useless as a parking sensor.'

At the end of the trial, which took place between May 18 and May 21, the jury found him guilty of perverting the course of justice and he was jailed for eight months.

Dyfed-Powys Police inspector Andrew Williams said: I would like to thank all involved for their efforts in putting together a strong file of evidence, and overcoming a number of difficulties during the investigation - not least the defendant's reluctance to provide any information in interview.

'Speed cameras - both fixed and mobile - are there not to frustrate drivers, but for the safety of all road users.

'By installing devices like this to evade being caught driving at excess speed, John showed a blatant disregard for the law, putting himself and others at risk.'

Sergeant Ian Price, GoSafe coordinator at Dyfed-Powys Police, said John's punishment was far greater than what he would have got had he just been caught speeding.

The offence of speeding in these circumstances would have ordinarily caused a driver to have their driving licence endorsed and a fine of £100 or an educational speed awareness course, he said.

However, when people go to extreme lengths to avoid prosecution in fitting technology to their car that allows them to exceed the speed limit without fear of prosecution, they not only show an insalubrious attitude towards the judicial system of this country and what it stands for, they also display a complete disdain towards the risk of harm to others where excessive or inappropriate speed are one of the primary causes of killed or serious injury collisions in the UK.

'The sentence handed out is a lesson to those in society who feel they can cheat the law and pose a real and substantial risk of harm on our roads'.

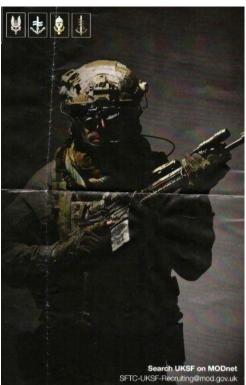
Teresa Ciano, GoSafe partnership manager added: 'Speeding is a choice, fitting a laser jammer is a choice; a choice which Mr John made to the detriment of safety of all other road users.'

https://www.dailymail.co.uk/news/article-9836223/Driver-64-jailed-eight-months-police-caught-using-laser-jammer-beat-speed-traps.html

# Gizza Job







From 'E



Anon

# PoSW's Items of Interest in the Media:-

### Items of Interest in the Media:-

Still trying to avoid the mainstream media as much as possible, even BBC Radio 4 which used to be my favourite listening but has now been taken over by the politically correct brigade with the constant trashing of our history and the never-ending grievance culture worked into almost every programme. If you are white, male and of a slightly right of centre persuasion then you can be expected to be blamed for all of the world's ills. The only BBC radio I listen to now is Radio 4 Extra which has a lot of vintage comedy in its listings from forty or fifty years ago when comedy was funny and actually made people laugh; shows like *I'm Sorry I'll Read That Again, Round the Horne and The Goon Show*, this last example an early vehicle for the late, great Peter Sellers before he became internationally famous in the *Pink Panther* films and others. Even here the "woke" crowd have to stick their oar in, so to speak. Before the programme starts the hushed voice of the continuity announcer will say something like, "We would like to point out that this show dates from 1957" - or whenever "and contains outdated language and attitudes". When you listen carefully to what the offensive content might be it is difficult to determine what the point of it is - except that Mr Sellers and his sidekick Spike Milligan often play the parts of comedy characters with Indian names and speak in the accent of folks from that part of the world – based on their own personal experiences no doubt since Spike was born there and Mr Sellers was stationed there in the forces.

At the time of writing in the last days of August the big story on the news websites is the exit of the United states forces from Afghanistan with much reporting of the huge amounts of military equipment the Americans have left behind, everything from hand-guns, assault rifles, machine guns, weapons of all kinds, large numbers of aircraft both fixed-wing and helicopters, vehicles of all kinds including large numbers of those Humvee off-roadtrucks and large quantities of radio communications equipment. The comparison has been made with the vast amount of equipment the British left behind in France at the time of the evacuation of Dunkirk in 1940. All of this is now in the hands of the Taliban although whether they will be able to keep the high-tech stuff working for long is a another matter.

There is much speculation that examples of these weapons will have been sold on to the Chinese and Iranians who will no doubt be able to incorporate the finer details in their own weapons designs which will almost be certainly be used against American soldiers when they are sent to fight in the next country on Uncle Sam's regime change list.

In keeping with the general principle of avoiding the mainstream media I have bought very few newspapers in the last couple of months. However, *The Times* of 6-August contained a couple of stories on the world news pages which although not connected with espionage as such have much to tell about the state of the world.

The first carries the headline, "Nearly half of Russians want a Stalin statue", written by Matthew Luxmmore in Moscow which goes on to say, "Almost half of Russians want a state-sanctioned monument to Joseph Stalin, according to an independent poll that shows the figure has nearly doubled in ten years.

The Levada Centre said 48 per cent of respondents would be 'positively disposed' to the idea of a statue to the Soviet despot to celebrate victory over the Nazis. Only 20 per cent firmly opposed the idea, and 29 per cent said they were 'indifferent'. A decade ago only 25 per cent backed a statue.

Approval of Stalin's legacy has grown under President Putin, who has made celebration of winning the 'Great Patriotic War' a pillar of his rule. Monuments to the dictator were erected en masse during his 28 years in power, but many were dismantled after Nikita Khrushchev took power. Recently the changing public mood has led to the building of a number of Stalin statues, mostly on private land."

The second brief item should, I guess, fall into the "Wars and rumours of wars" category.

"Indian-made aircraft carrier in sea trials" is the headline over a short paragraph from the AFP agency which says, "India – Delhi conducted sea trials of its first domestically built aircraft carrier and dispatched a task force for joint exercises with the United States and other allies in the South China Sea. The INS Vikrant will be India's second aircraft carrier, joining INS Vikramaditya, which was bought from Russia in 2004. The navy is pressing for a third carrier to counter Chinese influence."

Point to ponder:- "No one can terrorise a whole nation, unless we are all his accomplices" Ed Murrow, American broadcaster and journalist, speaking of Senator Joseph McCarthy, March 1954.

Thanks Peter

Now for something completely different!

# FIRST NIGHT | OPERA

# The Life and Death of Alexander Litvinenko review — worthy but dull

Grange Park Opera, West Horsley Richard Morrison Friday July 16 2021, 12.00pm, The Times

https://www.thetimes.co.uk/article/the-life-and-death-of-alexander-litvinenko-review-worthy-but-dull-xd0vv6llr

Already this summer Grange Park Opera has delved into the murky recesses of Russian history by staging Rimsky-Korsakov's Ivan the Terrible. Perhaps its new opera should have been called Putin the Terrible. Russia's president isn't actually named in the list of characters for The Life and Death of Alexander Litvinenko, but there can be little doubt that he's the villain of the piece. Either way, I don't think Bolshoi Opera will be staging the work any time soon.

As its title suggests, the two-act opera reflects on the bravery and horrific poisoning — in London in 2006 — of Litvinenko, a Russian secret service officer turned dissident whistleblower. A book co-written by his widow, Marina, provided the starting point for the opera's composer, Anthony Bolton, and the librettist, Kit Hesketh-Harvey.

What's alleged (but presented here as fact) is that Litvinenko was killed by having the deadly radioactive agent polonium-210 dropped into his tea by an old colleague, Andrei Lugovoy. That's not the only murderous episode portrayed. Using masked actors spread through the auditorium, we also sit through a jolting reenactment of the 2002 storming of the Dubrovka Theatre in Moscow by Chechen fighters (incited by Russian agents, the opera suggests).

Another flashback takes us to the Chechen war itself, where Litvinenko apparently sees the light and resolves to denounce publicly his employers. Also featured is the oligarch Boris Berezovsky, who finances Litvinenko and his family when they are exiled in London, and the anti-Putin investigative journalist Anna Politkovskaya. Her assassination is portrayed as well.

All of which might suggest that this is an opera full of so many shocks, terrors and malign misdeeds that you leave the theatre shaking with fear and righteous indignation. So it might have been if, for instance, Shostakovich had been available to compose it.

Sadly, Bolton is no Shostakovich. Through no fault of the conductor, Stephen Barlow, the orchestration (prerecorded by the BBC Concert Orchestra) is tame to the point of nonentity, the harmonies mostly drearily atonal, and the vocal setting of Hesketh-Harvey's equally stodgy words as grey as a foggy day in Omsk.

That's a pity because a good cast — including Adrian Dwyer as Litvinenko, Rebecca Bottone as Marina and Edmund Danon as the presumed assassin Lugovoy — deserves something a lot more expressive. The pastiche Russian Orthodox chorus, stirringly hurled out, is better written, and there's a cracking tune to herald Berezovsky's birthday party. Unfortunately it was written by Tchaikovsky.

Stephen Medcalf's staging is a whirr of video projections, including much meticulously researched news footage. The whole project is undeniably worthy, but it would have worked far better as a spoken play or TV docudrama.

https://www.thetimes.co.uk/article/the-life-and-death-of-alexander-litvinenko-review-worthy-but-dull-xd0vv6llr

## Beware of Chinese spies, visa applicants told

The Times17 Aug 2021Matt Dathan Home Affairs Editor Kaya Burgess

https://www.thetimes.co.uk/article/beware-of-chinese-spies-visa-applicants-told-thdz6g8hq

The government is urging Hongkongers to apply for Britain's new visa scheme online because China is stationing agents outside application centres, The Times has learnt.

Ministers have been given intelligence that undercover agents are spying on dissidents coming and going from two centres in Hong Kong.

It is feared that they are passing on names and photos of dissidents to the Chinese authorities in an attempt to block their departure. The Times revealed last week that Chinese spies were posing as dissidents in an attempt to enter Britain through its Hong Kong visa scheme.

The Home Office has put in extra background checks for the visa applications, which are "much more thorough than any other", sources said.

The UK has received more than 35,000 applications for the five-year scheme, open to British National Overseas (BNO) citizens from Hong Kong, since it opened on January 31.

The scheme was launched in response to China's security crackdown last year. Its national security law imposed stringent measures on Hongkongers, ostensibly to prevent terrorism, but it was seen by many as an attack on freedom of speech. Almost half of applications received by the end of May came from people who had already travelled to the UK.

The government is working with community groups in Hong Kong to urge those still on the island who want to apply for the visa to do so online rather than in person because of the spying fears.

While Hongkongers with certain biometric passports can carry out the whole process online, those who are unable to scan their passports with a smartphone need to attend a visa centre. However, this process is being reviewed to see if there is a way to avoid using the centres.

A Home Office spokesman said: "There are safeguards in place throughout the application process to ensure the BNO route is safe and secure for those applying. The majority of applicants will be able to apply for the BNO route via a fully digital process, eliminating the need to attend a visa application centre."

The Times has also learnt that a cross-government taskforce put in place to help Hongkongers integrate in the UK includes at least one member who belongs to an organisation that supports China's new security laws. The member, who cannot be named because the UK government keeps membership secret to avoid them facing intimidation or pressure from Beijing, has publicly supported the Chinese Communist Party.

The Hongkongers in Britain organisation has written a letter to the UK government saying that the individual's inclusion in the taskforce "contravenes the very ethos and rationale of the BNO visa scheme". It warned that the inclusion of a party supporter risked exposing "key information" to Beijing.

In response, the government has pledged to remove from the taskforce any member who is found to support China's security crackdown.

https://www.thetimes.co.uk/article/beware-of-chinese-spies-visa-applicants-told-thdz6g8hq

Obviously linked to the above:

### MI5 warns spies of Chinese honeytraps

David Sanderson

Monday November 10 2014, 12.01am, The Times

https://www.thetimes.co.uk/article/mi5-warns-spies-of-chinese-honeytraps-cisbwjjytmj

Beware Chinese women seeking friendship, Britain's defence officials have been warned (David Sanderson writes).

A security manual detailing how to avoid honeytraps is reported to have been been issued to leading members of Britain's defence establishment.

The Ministry of Defence document warned that China's attempt to cultivate "friends" is subtle and long term, adding that its intelligence agents are "expert flatterers" who are "well aware of the softening effect of food and alcohol". It said that China and Russia may attempt to blackmail officials "through knowledge of marital infidelity or sexual activity".

The document, reported in The Sunday Times, said that China did not target specific data but instead had a "vast and indiscriminate" appetite for information. "They do not 'run agents', they make friends," the article said. "Although there are Chinese intelligence officers, both civilian and military, these fade into insignificance behind the mass of students, businessmen and locally employed staff working, at least part-time, on the orders of various parts of the state intelligence-gathering apparatus." The Ministry of Defence refused to comment.

https://www.thetimes.co.uk/article/mi5-warns-spies-of-chinese-honeytraps-cjsbwjjvtmj

The above reminded me of that offered in En120 and my colleagues warning:

### Downfall of 'double agent' revealed after 23 years

France

**Charles Bremner** 

A French spy who fell for a Chinese interpreter in Beijing goes on trial for treason today with two others.

Henri M, 74, a former lieutenant—colonel, was the Beijing station chief for the DGSE, France's equivalent to MI6. The spy, a Mandarin speaker, is accused of passing secrets to a foreign power and "damaging the fundamental interests of the nation".

He was dismissed from the intelligence service and sent home in 1997 after only a few months for starting a relationship with JH, the female interpreter for the French ambassador.

The case is unusual because the DGSE waited two decades before beginning a prosecution, apparently in a move to "spring clean" the agency by

sending cases to the courts. Facing the same charges in the special seven-judge court is Pierre-Marie H, 68, a retired civilian officer of the DGSE.

He was allegedly recruited by Beijing when he was approaching retirement and looking for extra income. Laurence H, Pierre-Marie's wife, is accused of "concealment of property derived from intelligence with a foreign power".

Henri M, who was said to have been a go-between, was serving in a diplomatic post with second secretary rank.

The Chinese would have known his true role when he was snared by J H.

She is believed to have been working for the Ministry of State Security, China's most powerful intelligence agency. Colleagues told the French media that he was sent to Beijing without his wife and had been feeling lonely.

After leaving the agency Henri M returned to China in 2003, where he married the interpreter The couple set up HM China, a British-registered business, and lived on Hainan Island, off the southern coast of China.

The story was reported by Franck Renaud, an investigative writer, in a 2010 book. A person claiming to be Henri M then surfaced online to deny that he had defected and insists that he had faced no legal action.

In 2017 he was arrested in France by officers of the DGSI, the domestic security service, which also went after Pierre—Marie H, who had kept a low profile, unlike his compatriot.

He is reported to have spent his career in modest posts, starting in counter-espionage and ending in Dijon after irritating his superiors with conspiracy theories about Freemasons and communists. He was arrested at Zurich airport after arriving from Sri Lanka carrying more than £25,000 in cash.

No details have been officially confirmed. Florence Parly, the defence minister, said after the arrests in 2018 that the pair were suspected of treason and appeared to have jeopardised national interests.

A former colleague of the men told Marianne, a weekly news magazine; "My theory is that Henri M betrayed out of love and began working with the Chinese. He would appear to have served as liaison agent with Pierre—Marie H and his import—export busi- ness justified his travels."

Lawyers for the two men are expected to ask for the case to be dismissed.

Henri M has been free on bail for a year but Pierre-Marie H has been held in Fleury—Mérogis prison near Paris. If convicted, they face long prison terms. [Thanks 'E']

Ed: This piece from 'E' took a long time to OCR and convert. It is interesting because I too was apparently targeted by a Chinese lady of some assumed social standing.

On my way to a book release and signing [House of Spies by Peter Matthews] at St Ermin's Hotel on 3rd November 2016 I was approached and spoken to by the lady who introduced herself as Chi. Well dressed, wearing beautiful clothes and excellent perfume, well spoken, she engaged me in conversation for almost 40 minutes. What was my spare time interest, my occupation and so on? Was I happily married? It just went on. What was interesting was the lady had sat next to me when there were plenty of free seats available elsewhere. She also made sure her left leg, she was on my right, occasionally moved against my right leg.

It was interesting she moved to my right because since my neurosurgery years ago my right ear is more acute for conversation.

The lady stated she was not married but preferred the company of professional married men. She liked dining out but when I asked her profession she hedged the question and quickly moved on, complimenting me on my dress sense, 'Sports Jacket, white shirt, Royal Signals tie, Cavalry brown slacks and shiny brown shoes.'

Surprised she knew about the Royal Signals to be honest.

Could she have my address and telephone number? No she could not!. It's a pity she said, really interested in what I do in my spare time. Very touchy feely, could we meet at a date and place we could set now. Sorry, best not.

It wasn't until a month or so later I was having lunch with a contact I mentioned this and he said it was almost certainly a pick up. What might have happened? Who knows but the lady was very attractive for her age [estimated as 45 to 50] and on reflection my arrival and alighting from the train at the Underground Station at St James' saved my bacon! This is not wishful thinking but something that occurred a few years back and for someone who has a penchant for Asian ladies was very, very tempting. [This part takes the reader straight back to the Honeytrap Warning]

# **Chart Section Index**

- 1. Prediction Chart
- 2. M01 Schedule
- 3. Family III
- 4. XPA1 schedule c XPA2 schedules m and p

# September 2021

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Sep	Oct
					Ω	Ŋ	0.000		=01	0.1 =	kHz, ID,	kHz, ID,
Х	Х	Х	Х	Х			0000		F01	01A	17471	17471
Х	Х	Х	Х	Х	Х	Х	0000		V13	0	14040/12040/10140	18040
Х				Х			0010/0030/0050		M12	01B	991	17429/16229/15929 429
Х				Х			0025/0035		F01	01A	15672/13892	14434/11439
									-		6942/ 8142/	6837/ 8037/ 9237
	Х			Х			0030/0050/0110		M12	01B	912, search	802
	Х		Х				0100/0120/0140		M12	01B		16218/15918/14518 295
Х				Х			0125/0135		F01	01A	15672/13892	14434/11439
						x	0100/0120/0140		V07	01B		15925/14725/13425
										0	511	974
X	Х	Х	Х	Х	Х	Х	0200		V13	U	search (15388?)	search (15388?)
Х							0210/0310		E06	01A	11426/14477 537	11528/14613 537
Х				Х			0300		E11	03	18#, search	18#
											13557/11521	16219/13545
			Х	Х			0300/0400		E06	01A	361	361
Х	Х	Х	Х	Х	Х	Х	0300		V13	0	search (15388?)	search (15388?)
		Х	Х				0315		E11	03	x7850 25#, search	x7850 25#
Х	Х	Х	Х	Х	Х	х	0400		V13	0	11430	15388
											11616/ 9322	11616/ 9322
Х	Х	Х	Х	Х			0400/0420		S06	01A	480	480
			Х				0430/0450/0510		E07A	01B		6788/ 7488/ 9322
											741 5371	741
Х							0450		E11	03	41#	5371 41#
Х		Х		Х		Х	0455		HM01	18	10860	10860
	Х		Х		Х		0455		HM01	18	11462	11462
Х	Х	Х	Х	Х	Х	Х	0500		V13	0		15388, 11430
	***		.,				0500		C117	03		
	Х		Х				0500		S11A	0.3	38#, search	38#
Х	Х	Х	Х	Х			0500/0520		M14	01A	12211/10243 952	12211/10243 952
												13471/14771/15871
Х	Х						0500/0510/0520		XPB1	01B	14835/15935/16225	16271/17471/18271
							0530/0540/0550				check	check
			Х	Х			0500/0600	1/3	E06	01A	14370/16265	
											354	11116
Х		Х					0510		S11A	03	11116 65#	11116 65#
							0.5.0.0				9441	9441
	Х			Х			0530		M01A	14	751	751
		Х	Х				0530		M01A	14	9129 or 9192	9129 or 9192
											498	498
	Х						0530/0550/0610		M12	01B	9317/10484/11552 135	9317/10484/11552 135
		Х	Х				0540		M01A	14	7692	7692
		**		**		***	0555		HM01	18	10345	10345
X	Х	Х	Х	Х	Х	Х	0555		HM01	18	10345 14375	10345 14375
-	Λ		Λ		Λ				111101	1 0	x5779	x5779
				Х		Х	0600		E11	03	35#, search	35#
											", SCALOII	"

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Sep kHz, ID,	Oct kHz, ID,
Х	Х	Х	Х	Х	Х	Х	0600		V13	0	16134, 11430	15388, 11430
	Х						0600/0610		S06S	01A	15855/16485 438	15855/16485 438
						Х	0600/0620/0640		E07	01B	9261/10261/11461 224	10317/11117/12217 312
			Х	Х			0600/0700	1/3	E06	01B		18425/20230 186
	х			Х			0620		M01A	14	10233 or 10235 354/458	10233 or 10235 354/458
		Х	Х				0620		M01A	14	9421 135	9421 135
	Х			Х			0630		M01A	14	9447 143/796	9447 143/796
		Х	Х				0630		M01A	14	8111 902/536	8111 902/536
Х							0630/0640		S06S	01A	22185/20050 462, check	22185/20050 462
Х		Х					0640		E11	03	12153 94#	12153 94#
	х		Х				0645		E11	03	8422 51#	8422 51#
Х		Х		Х		Х	0655		HM01	18	9330	9330
	Х		Х		Х		0655		HM01	18	13435	13435
Х			Х				0700		S11A	03	8597 47#	8597 47#
	Х			Х			0700		E11	03	8180 57#	8180 57#
Х	Х	Х	Х	Х	Х	Х	0700		V13	0	8169	8169
						37	0700		M01	01B	6510	6510
						Λ	0700		1401	OID	463	463
	Х						0700/0710		S06S	01A	5760/ 6930	5760/ 6930
							0,00,0,10			0 = 11	452	452
	Х			Х			0700/0720/0740		E07	01B	363	15962/17462/18562 945
	Х		Х				0700/0720/0740		M12	01B	10836/10136/ 9136 811	
Х		Х					0700/0720/0740		XPA2	01B		13372/14672/15872
	Х			Х			0710		M01A	14	10651	10651
											297/358 9175	297/358 9175
		Х	Х				0710		M01A	14	146/208	146/208
	Х		Х				0710/0730/0750		XPA1	01B		12167/13437/14972
Х		Х					0715		E11	03	75#, search	75#
	Х			Х			0715		E11	03	9963 63#	9963 63#
	Х			Х			0720		M01A	14	9151 728	9151 728
					Х	Х	0730		E11	03	x8102 49# <b>search</b>	x8102 49#
Х	Х						0730/0740		S06S	01A	7425/11560 427	7425/11560 427
Х		Х					0730/0740		S06S	01A	11530/12140 172	11530/12140 172

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Sep kHz, ID,	Oct kHz, ID,
Х			Х				0745		E11	03	10213	10213 26#
	Х		Х				0745		E11	03	14865	14865
		Х		Х			0745		E11	03	17410	17410 34#
Х		Х		Х		v	0755		HM01	18	9065	9065
^	.,,	Λ	Х	Λ	Х	Λ	0755		HM01	18	11365	11365
	X									0		
Х	Х	Х	Х	Х	Х	Х	0800		V13	U	8169	8169
			Х				0800/0810		E17Z	01A	14260/12930 217	14260/12930 217
	Х						0800/0810		S06S	01A	11635/10420 127	11635/10420 127, check
					X		0800/0810	1	S06S	01A	10350/ 8520 132	10350/ 8520 132
					Х		0800/0820/0840		E07A	01B	11153/12153/13453 114	11484/12184/13384 413
		х				Х	0800/0820/0840		M12	01B		17441/18641/19241 462
			Х	Х			0820		E11	03	5941 43#	5941 43#
	Х	Х					0820		E11	03	19184 13#	19184 13#
					х	Х	0830		S11A	03	6433 37#, check	6433 37#
							0830/0840		S06S	01A	9220/ 8270 764	9220/ 8270 764
х		Х					0830/0840		S06S	01A	9082/ 9952 464	9082/ 9952 464
				Х			0830/0840		S06S	01A	12140/13515 156	12140/13515 156
х			Х	Х			0830/0930		S06	01A	19035/15645 842	20312/16237 842
Х		Х					0845		E11	03	12202 71#	12202 71#
	Х		Х				0845		E11	03	12202 15#	12202 15#
		Х		Х		Х	0855		HM01	18	9240	9240
	Х		Х		Х		0855		HM01	18	11462	11462
X		Х					0900		E11	03	8180 53#	8180 53#
							0900/0910		S06S	01A	14580/13165 232	14580/13165 232
				Х			0900/0910		S06S	01A	5744/ 6524 239	5744/ 6524 239
Х		Х					0910/0930/0950		XPA2	01B	18206/16329/15824	17471/16149/14406
			Х		Х		0910/0930/0950		XPA2	01B		17438/16338/15938
х				Х			0915		S11A	03	6480 48#	6480 48#
Х	Х	Х	Х	Х	Х	Х	0930		M14	01A	16347	17458 617, only 10.+25. when msg repeat 15994 on 11.+26.

Mon	Tue	Ved	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Sep	Oct			
2	Г	Δ		щ	01	01					kHz, ID,	kHz, ID,			
		Х	Х				0930		E11	03	6940 27#	6940 27#			
Х			Х				0930/0940		S06S	01A	9081/10514 698	9081/10514 698			
X		Х		Х		x	0955		HM01	18	9155	9155			
	Х		Х		Х		0955		HM01	18	12180	12180			
									11110 =		7317	7317			
	Х			Х			1000		E11	03	30#, check	30#			
	Х						1000/1010		S06S	01A	6410/ 7340 427	6410/ 7340 427			
		Х					1000/1010		S06S	01A	13365/14505 276, <b>check</b>	13365/14505 276			
	Х	Х	Х	Х			1015/1025/1035		F01	01A	9128/ 7546/ 5113	11129/ 9082/ 7344			
							1000		0117	0.0	8088	8088			
	Х			Х			1020		S11A	03	42#	42#			
							1015				7317	7317			
Х		Х					1045		E11	03	69#	69#			
											6190/ 7230				
	Х						1100/1110		S06S	01A	265	265			
		Х			Х		1100/1110/1110		XPB1	01B	search	search			
		21			21		1130/1140/1150		211 151	OID	Scaron	bearen			
	Х			Х			1100/1120/1140		XPA2	01B	search	14537/13437/10737			
	21	Х	Х	21			1100/1120/1140		XPA2	01B		14672/13472/12172			
							1100/1120/1140		711712	OID	13386/2189/11491	13386/2189/11491			
			Х				1110/1130/1150		M12	01B	725	725			
											-	14377/13461/12114			
Х							1200/1220/1240		M12	01B	317	317			
X	Х	Х	Х	Х	Х	х	1200		V13	0	18040	18040			
											9145/11460	9145/11460			
Х							1200/1210		S06S	01A	149	149			
											12415/14212	12415/14212			
Х			Х				1200/1210		S06S	01A	175	175			
												14462/13962/13462			
х					х		1200/1210/1210		XPB1	01B		12162/11562/10962			
							1230/1240/1250				check	check			
												14377/13461/12114			
	Х						1200/1220/1240		M12	01B	317	317			
	Х					Х	1200/1220/1240		XPA2	01B		14469/16169/17469			
		Х		Х			1200/1220/1240		XPA2	01B		13452/14452/15852			
											6923	6923			
	Х	Х					1205		E11	03	46#	46#			
		Х		Х			1210/1230/1250		XPA1	01B	search	search			
											5371	5371			
Х			Х				1300		E11	03	31#	31#			
Х	Х	Х	Х	Х	Х	Х	1300		V13	0	18040	18040			
												12176/11576/10276			
Х					Х		1300/1320/1340		E07	01B	512	512			
									1			14377/13461/12114			
Х							1300/1320/1340		M12	01B	317	317			
											5737	5737			
			x			x	1330		E11	03	52#	52#			
											14972	14972			
	Х				Х		1345		E11	03	91#	91#			
											ノエ#	ノエガ			

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Sep kHz, ID,	Oct kHz, ID,
			Х		Х		1410/1430/1450		E07	01B	16228/15928/14928 594	15849/14849/13449 746
					Х		1500		м01	14	6260 463	6260 463
Х	Х						1500/1510		S06S	01A	6464/ 7242	6464/ 7242
					Х		1500/1520/1540		XPA2	01B	14373/13373/11573	13906/12106/10906
Х				Х			1510/1530/1550		E07A	01B	10583/ 9383/ 8183 531	11424/10124/ 9124 411
			Х				1530		E11	03	10330	10330
					Х	Х	1530		E11	03	4505 36#	4505 36#
	Х	Х	Х	Х	Х	x	1555		HM01	18	11435	11435
Х			Х				1600/1620/1640		M12	01B	search	search
		Х				x	1600/1620/1640		M12	01B	14927/13927/12227 992	
	Х		Х				1600/1620/1640		XPA2	01B	13887/13387/11587	
	Х					Х	1605		E11	03	5082 23#	5082 23#
		Х				Х	1625		E11	03	6923 97#	6923 97#
	Х		Х				1645		E11	03	33#, search	33#, search
				Х		Х	1650		E11	03	11116 92#	11116 92#
	Х	Х	Х	Х	Х	x	1655		HM01	18	11530	11530
		Х					1700/1720/1740		E07	01B	12139/10639/ 9139 161	
			Х				1700/1720/1740		M12	01B	12162/11566/1ß711 546	
		Х					1710/1730/1750		M12	01B	12162/11566/10711 546	12162/11566/10711 546
Х			Х				1730		E11	03	7864 41#	7864 41#
Х						Х	1745		E11	03	13470 24#	13470 24#
Х	Х	Х	Х	Х	Х	x	1755		HM01	18	11635	11635
	Х		Х				1800		M01	14	5475 463	5475 463
			Х				1800/1820/1840		M12	01B	12162/11566/10711 546	12162/11566/10711 546
	Х			Х			1840/1850/1900	1	F01	01A	13467/11084/ 9052	11136/ 9074/ 7723
		Х			Х		1850		S11A	03	10213 28#	10213 28#
Х			Х				1900		E11	03	7317 64#	7317 64#
	Х					Х	1900/1910/1910 1930/1940/1950		XPB1	01B		9323/ 8123/ 7723 6923/ 5823/ 5123 <b>check</b>
		Х					1900/1920/1940		M12	01B	8047/ 6802/ 5788 463	8047/ 6802/ 5788 463
				Х			1900/2000	1/3	S06	01A	9056/ 6825 768	

	(1)	77	7		1)	C					Sep	Oct
Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	kHz, ID,	kHz, ID,
			_								4181	4181
		Х			X		1910		E11	03	39#	39#
											8530	8530
				Х		Х	1910		E11	03	61#	61#
											5020	5020
	Х		Х				2000		M01	14	463	463
							0000/0000/0040		1410	015	11109/10309/ 9209	10318/ 9218/ 8118
Х			Х				2000/2020/2040		M12	01B	385	178
							2000/2020/2040		M12	01B	14377/13461/12112	14377/13461/12112
			Х				2000/2020/2040		MIZ	OIB	317	317
		Х					2000/2020/2040		E07A	01A	8144/ 6944/ 5744	8144/ 6944/ 5744
		Λ					2000/2020/2040		EU/A	UIA	147	147
				Х			2000/2100	1/3	S06	01A		9056/ 6825
				Λ			2000/2100	1/0	500			768
X		Х		Х		Х	2055		HM01	18	11635	11635
	Х		Х		Х		2055		HM01	18	16180	16180
				x	x		2100/2120/2140		M12	01B	7961/ 6861/ 5861	5794/ 6794/ 8094
							2100/2120/2110		1112	O I D	988	770
x			x				2110/2130/2150		M12	01B		8164/ 6964/ 5764
											218	197
X		Х		Х		Х	2155		HM01	18	10715	10715
	Х		X		X		2155		HM01	18	17480	17480
		Х			Х		2210/2230/2250		M12	01B	12218/11118/10218	
											212	931
					Х		2230/2240		F01	01A	20618/18048	20966/18954
					Х		2330/2340		F01	01A	20618/18048	20966/18954

### M01 FREQUENCY LIST

## Frequencies may vary by a few kHz

### JAN FEB NOV DEC

M01/1

**197** 

DAY	TIME UTC	FREQ kHz
TUE / THU	1800	5320
TUE / THU	2000	4490
SAT	1500	5810
SUN	0700	5465

### MAR APRIL SEPT OCT

M01/2

463

DAY	TIME UTC	FREQ kHz
TUE / THU	1800	5475
TUE / THU	2000	5020
SAT	1500	6260
SUN	0700	6510

### MAY JUNE JULY AUG

M01/3

025

DAY	TIME UTC	FREQ kHz
TUE / THU	1800	5280
TUE / THU	2000	4905
SAT	1500	6435
SUN	0700	6780

Updated: 02/04/2014

Mon	Tue	Thu	Fri	Sat	UTC	wk Stn	Fam	Jul kHz, ID,	Aug kHz, ID,	Sep kHz, ID,	Oct kHz, ID,	Remarks
х			х		0300	E11	03	9060 18#	9060 18#	18#, search	18#	since 07/15, last log 05/21
	х	x			0315	E11	03	14575 25#	14575 25#	x7850 25#, search	x7850 25#	since 01/14, last log 06/21
х					0450	E11	03	7469 41#	7469 41#	5371 41#	5371 41#	since 02/10, last log 08/21 2nd transmission Thu 1730z
	x	х			0500	S11A	03	18168 38#	<b>15690</b> 38#	38#, search	38#	since 05/14, last log 07/21 until 07/21 at 1045z
х	х				0510	S11A	03	13537	13537	11116 65#	11116	since 08/19, last log 08/21
			x	,	x 0600	E11	03	9150	9150	x5779	x5779	since 04/15, last log 08/21
					0640	E11	03	35# 15800	35# 15800	35#, search 12153	35# 12153	
х	х							94# 8091	94#	94# 8422	94# 8422	since 07/17, last log 08/21
	х	х			0645	E11	03	51# 9339	51# 9339	51# 8597	51# 8597	since 07/09, last log 08/21
х		х			0700	S11A	03	47# 8680	47# 8680	47# 8180	47# 8180	since 04/10, last log 08/21
	х		х		0700	E11	03	57#	57#	57#	57#	since 01/12, last log 08/21
х	х				0715	E11	03	18030 75#	18030 75#	75#, search	75#	since 06/21, last log 08/21 temporary?
	x		х		0715	E11	03	10429 63#	10429 63#	9963 63#	9963 63#	since 02/11, last log 08/21
				x z	× 0730	E11	03	<b>7377</b> 49#	7377 49#	x8102 49# <b>search</b>	x8102 49#	since 07/15, last log 08/21 until 06/21 at 0710z
х		х			0745	E11	03	9610 26#	9610 26#	10213	10213	since 03/14, last log 08/21
H	x	x		1	0745	E11	03	14940	14940	14865	14865	2nd transmission Thu 1530z since 01/20, last log 08/21
	x		×		0745	E11	03	22# 15720	22# 15720	22# 17410	22# 17410	since 06/17, last log 08/21
	^							34# 4909	34# 4909	34# 5941	34# 5941	
		Х	х		0820	E11	03	43# 17378	43# 17378	43# 19184	43# 19184	since 10/09, last log 08/21
	х				0820	E11	03	13#	13#	13#	13#	since 12/18, last log 08/21
				x z	к 0830	S11A	03	5149 37#	5149 37#	6433 37#, check	6433 37#	since 02/14, last log 08/21
х	х				0845	E11	03	12815 71#	12815 71#	12202 71#	12202 71#	since 09/10, last log 08/21
	x	х			0845	E11	03	12153 15#	12153 15#	12202 15#	12202 15#	since 07/17, last log 08/21
х	х				0900	E11	03	7449 53#	7449 53#	8180 53#	8180 53#	since 10/05, last log 08/21
х			х		0915	S11A	03	6814 48#	6814 48#	6480 48#	6480 48#	since 04/19, last log 08/21
	х	x			0930	E11	03	6923 27#	6923	6940	6940 27#	since 02/14, last log 08/21
	x		x		1000	E11	03	12153	27# 12153	7317	7317	since 11/16, last log 08/21
	x				1020	S11A	03	30# 10125	30# 10125	30#, check 8088	30# 8088	since 02/10, last log 08/21
			х					42# 8545	42# 8545	42# 7317	42# 7317	2nd transmission Thu 1730z
х	х				1045	E11	03	69#	69#	69# 6923	69# 6923	since 03/18, last log 08/21 since 03/10, last log 08/21
	х				1205	E11	03	46#	46#	46#	46#	2nd transmission Mon 0450z
х		х			1300	E11	03	31#	5737 31#	5371 31#	5371 31#	since 07/14, last log 08/21
		x		3	к 1330	E11	03	5409 52#	5409 52#	5737 52#	5737 52#	since 05/15, last log 07/21 until 06/21 mon/fri at 1530z
	x			х	1345	E11	03	12984 91#	12984 91#	14972 91#	14972 91#	since 10/15, last log 08/21
П		х			1530	E11	03	10356 26#	10356 26#	10330 26#	10330	since 06/14, last log 08/21 2nd transmission Mon 0745z
Ħ	t		П	x z	x 1530	E11	03	5082 36#	5082 36#	4505 36#	4505 36#	since 03/14, last log 08/21 2nd transmission Thu 1530z
H	x			3	x 1605	E11	03	5371	5371	5082	5082	since 11/15, last log 08/21
H	x		H	-	x 1625	E11	03	7863	23# 7863	23# 6923	23# 6923	since 02/15, last log 08/21
H	-		Н	-   '				97# 14575	97# 14575	97#	97#	since 10/11, last log 08/21
Н	x	х			1645	E11	03	33# 12229	33# 12229	33#, search 11116	33#, search 11116	until 04/21 at 1230z
	1		х	3	x 1650	E11	03	92#	92#	92#	92#	since 05/16, last log 08/21 since 03/10, last log 08/21
х		х			1730	E11	03	41#	41#	41#	41#	2nd transmission Mon 0450z
х	1			2	x 1745	E11	03	14410 24#	14410 24#	13470 24#	13470 24#	since 04/18, last log 08/21
	х			х	1850	S11A	03	12457 28#	12457 28#	10213 28#	10213 28#	since 06/17, last log 08/21
х		x			1900	E11	03	7600 64#	7600 64#	7317 64#	7317 64#	since 05/16, last log 08/21
Ħ	х			х	1910	E11	03	4783	4783 39#	4181	4181	since 02/14, last log 08/21
H	+		x	3	x 1910	E11	03	9610	9610	8530	8530	since 04/17, last log 08/21
Ш							1	61#	61#	61#	61#	

<u>XPA1 Sched c and XPA2[Sched m & p] Russian Intelligence and/or Diplomatic Multitone Systems</u> [Radiogramma] Transmission Schedules.

H+40         12221       13521         13363       14563         13984       14984         11576       10776         12227       10827         11559       10794         15814       16314         16169       17469         13883       12183         12207       13507	Zulu >	XPA1 Tuesday/Thurs	Sched c		XPA2 Sch	Sched m		XPA2 Sched	Sched p	
12157         13462         14374         10921         12221         13821           13397         14413         15972         11163         13363         14563         14563           10428         11431         13414         1442         13844         14984         14984           1169         12179         13431         1442         15842         16342         16742           11169         12179         13431         13376         11576         10776         10776           10446         11474         12175         13394         12129         10659         10659           10234         11511         12117         12159         11659         10659         1669           12167         13437         14972         14469         16169         17469         17469           13978         14859         15871         14783         13883         12183           11531         12137         10807         12207         13807	Month	H+10 H+ 0710 / 0810z			H 00 H+2 1200/2100	•		ıay,	$^{ m MH}_{ m 0800z}$	
13397         14413         15972         11163         13363         14563           12132         13453         14576         13384         13984         14984         14984           10428         11431         13441         14442         15842         16342         16342           11169         12179         13431         13376         11576         10776         10776           10446         11474         12175         13394         12159         10794         10794           10234         11511         12117         12159         11559         10559         10559           11667         11518         14972         14469         16169         17469         17469           11531         12137         14889         15871         14783         13883         12183           11531         12137         13932         16807         12207         13507	Jan	12157	13462	14374	10921	12221	13521	11493	13393	13993
112132         13453         14576         13384         13984         14984           10428         111431         13441         14442         15842         16342           11169         12179         13431         13376         11576         10776           11421         12151         13972         13427         10794         10794           10446         11474         12175         13394         12194         10794           10862         11571         12116         11519         16559         16559           12167         13437         14469         16169         17469         17469           11531         12137         14889         15871         14783         13883         12183           11531         12137         13932         10807         12207         13507         13507	Feb	13397	14413	15972	11163	13363	14563	13387	13887	14787
11431         13441         1442         15842         16342           11169         12179         13431         13376         11576         10776           11421         12151         13972         13427         12227         10827         10827           10446         11474         12175         13394         12194         10794         10794           10234         11511         12117         12159         11559         10559         10559           10862         11571         12216         13914         15814         16314         16314           12167         13437         14469         16169         17469         17469           11531         12137         13883         12183         12183	Mar	12132	13453	14576	13384	13984	14984	13931	14831	16131
11169         12179         13431         13376         11576         10776           11421         12151         13972         13427         12227         10827         10827           10446         11474         12175         13394         12194         10794         10794           10234         11511         12117         12159         11559         10559         10559           11062         11571         12216         13914         15814         16314         16314           11367         14859         15871         14469         16169         17469         17469           11531         12137         13932         10807         12207         13507	Apr	10428	11431	13441	14442	15842	16342	11409	12209	13409
11421         12151         13972         13427         12227         10827           10446         11474         12175         13394         12194         10794           10234         11511         12117         12159         11559         10559           10862         11571         12216         13914         15814         16314           12167         13437         14972         14469         16169         17469           11531         12137         13932         10807         12207         13507	May	11169	12179	13431	13376	11576	10776	12148	13448	13948
10446         11474         12175         13394         12194         10794           10234         11511         12117         12159         11559         10559           10862         11571         12216         13914         15814         16314           12167         13437         14972         14469         16169         17469           13978         14859         15871         14783         13883         12183           11531         12137         13932         10807         12207         13507	June	11421	12151	13972	13427	12227	10827	12148	13448	13948
10234         11511         12117         12159         11559         10559           10862         11571         12216         13914         15814         16314         16314           12167         13437         14972         14469         16169         17469         7469           13978         14859         15871         14783         13883         12183         12183           11531         12137         13932         10807         12207         13507	July	10446	11474	12175	13394	12194	10794	12148	13448	13948
10862         11571         12216         13914         15814         16314           12167         13437         14972         14469         16169         17469           13978         14859         15871         14783         13883         12183           11531         12137         13932         10807         12207         13507	Aug	10234	11511	12117	12159	11559	10559	12152	13552	13952
12167         13437         14972         14469         16169         17469           13978         14859         15871         14783         13883         12183           11531         12137         13932         10807         12207         13507	Sept	10862	11571	12216	13914	15814	16314	12152	13552	13952
13978     14859     15871     14783     13883     12183       11531     12137     13932     10807     12207     13507	Oct	12167	13437	14972	14469	16169	17469	13372	14672	15872
11531 12137 13932 10807 12207 13507	Nov	13978	14859	15871	14783	13883	12183	11529	13429	13929
	Dec	11531	12137	13932	10807	12207	13507	11493	13393	13993

#### SPECIAL MATTERS

Thanks to all our contributors:

Ary, BR, DanAr, Dannix, , E, HH, HJH, JkC, Jochen, KW, Malc, MaleAnon, , PoSW, PLdn, RNGB, SloRoll, tING, XAH Apologies to anyone missed.



### **MESSAGES:**

E: Thanks for valid input. The noise you refer to is just about everywhere. Conditions are generally bad with the odd lift, enjoy what's left.

#### RELEVANT WEBSITES

ENIGMA 2000 Website: http://www.enigma2000.org.uk

Time zone information: <a href="http://www.timeanddate.com/library/abbreviations/timezones/">http://www.timeanddate.com/library/abbreviations/timezones/</a>

Encyclopedia of Espionage, Intelligence, and Security <a href="http://www.espionageinfo.com/">http://www.espionageinfo.com/</a>

# 2021

		Ja	nua	iry					Fe	bru	ary					N	arc	h		
S	M	T	W	T	F	S	S	M	T	W	Т	F	S	S	M	T	W	Т	F	S
				-77	1	2		1	2	3	4	5	6		1	2	3	4	5	6
3	4	5	6	7	8	9	7	8	9	10	11	12	13	7	8	9	10	11	12	13
10	11	12	13	14	15	16	14	15	16	17	18	19	20	14	15	16	17	18	19	20
17	18	19	20	21	22	23	21	22	23	24	25	26	27	21	22	23	24	25	26	27
24	25	26	27	28	29	30	28							28	29	30	31			
31						0.000														
			Apri							May	_						Jun			
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	Т	W	Т	F	S
75.00	VIII O	120	100	1	2	3	4500	. 200	10	_		2722	1	11000	12.0	1	2	3	4	5
4	5	6	7	8	9	10	2	3	4	5	6	7	8	6	7	8	9	10	11	12
11	12	13	14	15	16	17	9	10	11	12	13	14	15	13	14	15	16	17	18	19
18	19	20	21	22	23	24	16	17	18	19	20	21	22	20	21	22	23	24	25	26
25	26	27	28	29	30		23	24	25	26	27	28	29	27	28	29	30			
_						-	30	31					_	_						_
		- 01	July	/					A	ugu	st					Sep	ten	bei		
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
				1	2	3	1	2	3	4	5	6	7				1	2	3	4
4	5	6	7	8	9	10	8	9	10	11	12	13	14	5	6	7	8	9	10	11
11	12	13	14	15	16	17	15	16	17	18	19	20	21	12	13	14	15	16	17	18
18	19	20	21	22	23	24	22	23	24	25	26	27	28	19	20	21	22	23	24	25
25	26	27	28	29	30	31	29	30	31					26	27	28	29	30		
													_							_
			ctob								ber						em			
S	M	Т	W	T	F	S	S	M	Т	W	Т	F	S	S	M	Т	W	Т	F	S
					1	2	10000	1	2	3	4	5	6				1	2	3	4
3	4	5	6	7	8	9	7	8	9	10	11	12	13	5	6	7	8	9	10	11
10	11	12	13	14	15	16	14	15	16	17	18	19	20	12	13	14	15	16	17	18
17	18	19	20	21	22	23	21	22	23	24	25	26	27	19	20	21	22	23	24	25
24	25	26	27	28	29	30	28	29	30					26	27	28	29	30	31	

Statements affecting the use of ENIGMA2000 material of all description and intellectual property of others:

### Copyright & Fair Use Policy

© All items posted on our website and within our newsletter remain the property of ENIGMA 2000 and are copyright.

The above applies only to documents found on this website and not logs sent to ENIGMA 2000 for their sole use which cannot be used elsewhere.

Within the Number Monitors Group site, the following applies:

USE OF POSTINGS, IMAGES, SOUND SAMPLES and OTHER FILES:

 $\ensuremath{\mathbb{O}}\xspace$  All items posted here remain the property of ENIGMA 2000 and are copyright.

MEMBERS' LOGS & IMAGERY POSTED HERE \*SOLELY FOR ENIGMA2000 USE\* CANNOT BE LIFTED FOR USE ELSEWHERE.